

AD-A168 940	PERFORMANCE MONITORING SYSTEM: SUMMARY OF LOCK STATISTICS FOR JULY-SEPTEMBER 1985(U) CORPS OF ENGINEERS FORT BELVOIR VA WATER RESOURCES SUPPORT CENTER F SHARP FEB 86 WRSC-86-SR-1 F/G 13/2	1/1
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PERFORMANCE MONITORING SYSTEM: SUMMARY OF LOCK  
STATISTICS FOR JULY-SEPTEMBER 1983(U) CORPS OF  
ENGINEERS FORT BELVOIR VA WATER RESOURCES SUPPORT  
CENTER F SHARP FEB 86 WRSC-86-SR-1 F/G 1

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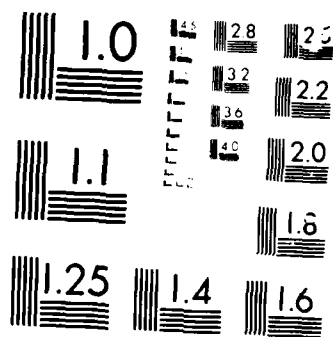
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US Army Corps  
of Engineers

Engineer Institute for  
Water Resources

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AD-A168 940

Performance Monitoring System:

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# Summary of Lock Statistics for July 1985 - September 1985

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February 1986

Summary Report 86-SR-1

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER 86-SR-1	2. GOVT ACCESSION NO. <b>AD-A168940</b>	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Performance Monitoring System Summary of Lock Statistics July 1985 - September 1985		5. TYPE OF REPORT & PERIOD COVERED Quarterly Summary Report July 1985 - September 1985
7. AUTHOR(s) Frank Sharp U.S. Army Corps of Engineers Water Resources Support Center Institute for Water Resources		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Army Corps of Engineers Water Resources Support Center, TRP Casey Building, Ft. Belvoir, VA 22060-5586		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS Office, Chief of Engineers, U.S. Army Corps of Engineers, Pulaski Building, 20 Massachusetts Avenue, N.W. Washington, D.C. 20314-1000		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE February 1986
		13. NUMBER OF PAGES 89
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)  Approved for Public Release ; distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES Although the data are edited, the United States Government does not warrant the suitability for all purposes and does not assume responsibility for results of computations performed with the data.		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Lock Performance Monitoring System Statistics Waterways		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  Lock Performance Monitoring data are collected at Corps locks by lock operators from observation and information provided by waterway operators. This quarterly summary is an overview of the collected statistics.		

PERFORMANCE MONITORING SYSTEM  
SUMMARY OF LOCK STATISTICS  
JULY 1985 - SEPTEMBER 1985

Navigation Data Management  
and Applications Branch  
Navigation Division

U.S. Army Corps of Engineers  
Water Resources Support Center  
Institute for Water Resources  
Ft. Belvoir, Virginia 22060-5586

## PREFACE

This report is a product of the Navigation Data Management and Applications Branch of the U. S. Army Engineer Institute for Water Resources (WRSC-IWR). The information is compiled from statistics collected at the Corps locks in support of the lock Performance Monitoring System (PMS).

The study is managed by Miss Shilpa B. Patel under the supervision of Mr. Francis M. Sharp, Chief of the WRSC-IWR Navigation Data Management and Applications Branch, and Dr. Lloyd G. Antle, Chief of the WRSC-IWR Navigation Division. The Office of the Chief of Engineers (OCE) sponsors are Mr. Robert Schmidt, DAEN-CWO-M, and Mr. Robert M. Daniel, DAEN-CWP-D.

Requests to update or change the distribution, comments and questions can be directed to Frank Sharp (202-355-3083) or Robert Baldwin (202-653-1007). The information is produced and distributed quarterly.

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Director, Institute for Water Resources

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## Introduction

The lock Performance Monitoring System (PMS) encompasses the collection, editing, maintenance and analysis of data collected at all Corps-owned and operated locks. The data have been collected since March of 1975 and consist of information describing the traffic through the locks as well as the physical aspects of lockages. The quarterly summary of selected statistics presented in the appendix provides an overview of the traffic and operation at each lock. The quarterly report is presented as a set of three tables for each Corps District. Information reported for each lock and chamber include:

TABLE 1. A listing providing the name of the lock, the river on which the lock is and its dimensions. In those cases where there is no quarterly information, this table will be the only display for the district.

TABLE 2. A table providing, by direction and total, the number of tows, commercial vessels other than tows, recreational vessels, barges (empty and loaded), commercial lockages, recreational lockages and tonnage.

TABLE 3. A summary of approach, entry, chambering and exit times (maximum, minimum and average) and the number of delays, total delay time, maximum delay time and average delay time.

Although the summary information will be computed and displayed for chambers at which there is data for only one or two months of the quarter, the fact is noted on the report.



TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
B2	NEW ORLEANS	LOWER MISS VALLEY	7/85	8/85 9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ATCHAFALAYA RIVER	11-BERWICK LOCK	0307/0045/11.0
BAYOU TECHE	31-KEYSTONE LOCK	0162/0036/12.0
FRESHWATER BAYOU	41-FRESHWATER BAYOU LOCK	0600/0084/15.0
GULF INTRACOASTAL	01-PORT ALLEN LOCK	1198/0084/15.0
	02-BAYOU SORREL LOCK	0800/0056/16.0
	03-INNER HRBR NAVIGATION CANL LK	0646/0075/40.0
	04-ALGIERS LOCK	0797/0075/15.0
	05-HARVEY LOCK	0425/0075/14.0
	06-BAYOU BOEUF LOCK	1158/0075/15.0
	07-VERMILLION LOCK	1200/0056/14.0
	08-CALCASIEU LOCK	1205/0075/15.0
	21-SCHOONER BAYOU CONTROL STRUCT	9999/0075/14.0
	22-CATFISH POINT CONTROL STRUCT	9999/0056/16.0
	23-CALCASIEU SALT WATER BARRIER	9999/0056/15.0
	77-LELAND BOWMAN LOCK	1200/0110/15.0
OLD RIVER	51-OLD RIVER LOCK	1200/0075/15.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/85 THROUGH 9/85  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B3	ST LOUIS	LOWER MISS VALLEY	7/85	8/85	9/85

---

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
KASKASKIA RIVER	01-KASKASKIA RIVER NAVAGATION LK	0610/0084/12.0
MISSISSIPPI RIVER	24-LOCK & DAM 24	0610/0110/12.0
	25-LOCK & DAM 25	0610/0110/12.0
	26-LOCK & DAM 26	0610/0110/12.0
	26-LOCK & DAM 26 AUX 1	0380/0110/12.0
	27-CHAIN OF ROCKS LOCK & DAM 27	1210/0110/12.0
	27-CHAIN OF ROCKS LK & DM 27 AX1	0610/0110/12.0

---

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC B3	DISTRICT NAME ST LOUIS	DIVISION NAME LOWER MISS VALLEY						MONTHS REPORTED				
								7/85		8/85		9/85
RIVER/LOCK NAME												
TOWS												
VESSEL												
RECRTN												
OTHER												
VESSEL												
TOTAL												
BARGS												
EMPTY												
FULL												
BARGES												
TOTAL												
LCKGES												
COMMER												
RECRTN												
OTHER												
LCKGES												
TOTAL												
TONNAGE												
(KTONS)												
(NAV, OPN, ETC)												
KASKASKIA RIVER												
KASKASKIA RIVER NAVAGATION LK												
xxx												
UPBOUND STATISTICS												
138 726 63 927 441 29 470 201 330 7 538 12												
DNBOUND STATISTICS												
139 727 64 930 19 454 473 203 348 5 556 659												
TOTAL												
277 1453 127 1857 460 483 943 404 678 12 1094 672												
MISSISSIPPI RIVER												
LOCK & DAM 24												
xxx												
UPBOUND STATISTICS												
371 406 22 799 1911 2144 4055 569 243 21 833 3185												
DNBOUND STATISTICS												
380 443 18 841 274 3831 4105 575 280 17 872 5425												
TOTAL												
751 849 40 1640 2185 5975 8160 1144 523 38 1705 8611												
LOCK & DAM 25												
xxx												
UPBOUND STATISTICS												
369 747 15 1131 1896 2125 4021 531 338 46 915 3199												
DNBOUND STATISTICS												
379 756 13 1148 277 3830 4107 544 365 41 950 5417												
TOTAL												
748 1503 28 2279 2173 5955 8128 1075 703 87 1865 8617												
LOCK & DAM 26												
xxx												
UPBOUND STATISTICS												
598 13 15 626 3205 3871 7076 1066 8 7 1081 5889												
DNBOUND STATISTICS												
593 19 10 622 765 6121 6886 1059 14 5 1078 8654												
TOTAL												
1191 32 25 1248 3770 9992 13962 2125 22 12 2159 14544												
LOCK & DAM 26 AUX 1												
xxx												
UPBOUND STATISTICS												
267 550 117 934 278 304 582 430 242 15 687 573												
DNBOUND STATISTICS												
270 704 115 1089 289 343 632 437 326 10 773 528												
TOTAL												
537 1254 232 2023 567 647 1214 867 568 25 1460 1102												
CHAIN OF ROCKS LOCK & DAM 27												
xxx												
UPBOUND STATISTICS												
1115 297 146 1558 4226 4538 8764 1087 86 38 1211 7078												
DNBOUND STATISTICS												
1131 383 154 1668 1275 7459 8734 1128 110 25 1263 10933												
TOTAL												
2246 680 300 3226 5501 11997 17498 2215 196 63 2474 18011												
CHAIN OF ROCKS LK & DM 27 AX1												
xxx												
UPBOUND STATISTICS												
0 0 0 0 0 0 0 0 0 0 0 0												
DNBOUND STATISTICS												
0 6 0 6 0 0 0 0 3 0 3 0												
TOTAL												
0 6 0 6 0 0 0 0 3 0 3 0												

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME				DIVISION NAME								MONTHS REPORTED					
B3	ST LOUIS				LOWER MISS VALLEY								7/85		8/85		9/85	
<hr/>																		
												ALL TIMES EXPRESSED IN MINUTES						
APPROACH				LOCK PROCESSING TIME (MIN.)								:	DELAYED	DELAY	DELAY	DELAY		
				ENTRY			CHAMBER			EXIT		:	TOWS	TIME	AVG	MAX		
MIN		AVG		MAX		:	MIN	AVG		MAX		:	MIN	AVG		MAX		
<hr/>																		
KASKASKIA RIVER																		
KASKASKIA RIVER NAVAGATION L	1	3	25	1	2	20	2	9	23	1	2	15	24	275	0.9	32		
MISSISSIPPI RIVER																		
LOCK & DAM 24	1	7	85	1	7	44	4	11	30	1	13	45	524	142422	189.6	5390		
LOCK & DAM 25	1	6	84	1	7	431	4	10	449	1	12	56	730	166771	222.9	6698		
LOCK & DAM 26	1	5	81	1	10	43	4	13	37	1	12	80	1191	300985	252.7	1821		
LOCK & DAM 26 AUX 1	1	4	102	1	3	93	4	12	41	1	4	116	533	22570	42.0	1218		
CHAIN OF ROCKS LOCK & DAM 27	1	7	411	1	6	31	5	12	60	1	6	286	1829	409896	182.5	4478		
CHAIN OF ROCKS LK & DM 27 AX	1	1	1	1	1	3	9	10	11	1	1	1	0	0	0.0	0		

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/85 THROUGH 9/85  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B4	VICKSBURG	LOWER MISS VALLEY	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
OUCHITA/BLACK RIV	01-JONESVILLE LOCK & DAM	0600/0084/23.4
	02-COLUMBIA LOCK & DAM	0600/0084/27.4
	03-FELSENTAL LOCK & DAM	0600/0084/11.0
	04-CALION LOCK & DAM	0600/0084/11.0
	06-LOCK & DAM 6	0268/0055/17.4
	08-LOCK & DAM 8	0268/0055/19.0
RED RIVER	41-RED RIVER LOCK & DAM #1	0685/0084/ 9.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC E4	DISTRICT NAME VICKSBURG	DIVISION NAME LOWER MISS VALLEY	MONTHS REPORTED									
			7/85			8/85			9/85			
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
-----												
DOUCHITA/BLACK RIV												
JONESVILLE LOCK & DAM	***											
UPBOUND STATISTICS	47	34	14	95	94	87	181	104	22	15	141	145
DNBOUND STATISTICS	51	31	7	89	83	103	186	104	17	23	144	137
TOTAL	98	65	21	184	177	190	367	208	39	38	285	282
COLUMBIA LOCK & DAM	***											
UPBOUND STATISTICS	26	26	4	56	11	69	80	34	15	5	54	98
DNBOUND STATISTICS	22	21	3	46	53	13	66	28	14	9	51	22
TOTAL	48	47	7	102	64	82	146	62	29	14	105	120
FELSENTHAL LOCK & DAM	***											
UPBOUND STATISTICS	44	589	24	657	3	47	50	67	354	9	430	64
DNBOUND STATISTICS	49	614	22	685	51	9	60	70	392	14	476	14
TOTAL	93	1203	46	1342	54	56	110	137	746	23	906	78
CALION LOCK & DAM	***											
UPBOUND STATISTICS	2	234	0	236	2	0	2	2	155	11	168	0
DNBOUND STATISTICS	3	234	0	237	0	3	3	3	167	12	182	5
TOTAL	5	468	0	473	2	3	5	5	322	23	350	5
LOCK & DAM 6	***	NO DATA RECORDED FOR THIS LOCK										
LOCK & DAM 3	***	NO DATA RECORDED FOR THIS LOCK										
RED RIVER												
RED RIVER LOCK & DAM #1	***											
UPBOUND STATISTICS	20	1	15	36	0	54	54	36	1	1	38	65
DNBOUND STATISTICS	33	0	10	43	79	20	99	40	0	1	41	3
TOTAL	53	1	25	79	79	74	153	76	1	2	79	69

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC B4	DISTRICT NAME VICKSBURG			DIVISION NAME LOWER MISS VALLEY									MONTHS REPORTED											
													7/85			8/85		9/85						
												ALL TIMES EXPRESSED IN MINUTES												
APPROACH			LOCK PROCESSING TIME (MIN.)									:	DELAYED	DELAY	DELAY	DELAY								
			ENTRY			CHAMBER			EXIT			:	TOWS	TIME	AVG	MAX								
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	TOWS	TOWS	(ALL VSLS)						
OUCHITA/BLACK RIV																								
JONESVILLE LOCK & DAM			1	6	45	1	5	75	5	17	54	1	7	40	24	643	6.5	138						
COLUMBIA LOCK & DAM			2	6	17	1	6	25	5	17	42	2	6	30	2	5	0.1	3						
FELSENTHAL LOCK & DAM			1	1	10	1	1	9	5	7	21	1	2	14	93	248	2.6	23						
CALION LOCK & DAM			1	2	17	1	1	20	5	8	24	1	2	12	5	9	1.8	21						
LOCK & DAM 6			NO DATA RECORDED FOR THIS LOCK																					
LOCK & DAM 8			NO DATA RECORDED FOR THIS LOCK																					
RED RIVER																								
RED RIVER LOCK & DAM #1			2	4	13	2	4	15	5	12	23	2	5	20	52	591	11.1	33						

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
DO	DIVISION OFFICE, NED	NEW ENGLAND	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CHARLES RIVER	01-CHARLES RIVER LOCKS & DAM	0000/0000/55.0
	01-CHARLES RIVER L&D AUX 1	0000/0000/55.0
	01-CHARLES RIVER L&D AUX 2	0000/0000/55.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD



TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E3	NEW YORK	NORTH ATLANTIC	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
HUDSON RIVER	01-TROY LOCK & DAM	0493/0044/15.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E4	NORFOLK	NORTH ATLANTIC	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ATLANT INTRCOASTAL	11-GREAT BRIDGE GUARD LOCK	0530/0072/12.0
DISMAL SWAMP	01-DEEP CREEK LOCK	0300/0052/ 6.0
	02-SOUTH MILLS LOCK	0300/0052/ 6.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC E4	DISTRICT NAME NORFOLK	DIVISION NAME NORTH ATLANTIC	MONTHS REPORTED									
			7/85	8/85			9/85					
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
		(NAV, OPN, ETC)										
-----												
ATLANT INTRCOASTAL												
GREAT BRIDGE GUARD LOCK		***										
UPBOUND STATISTICS	220	1685	56	1961	109	154	263	241	666	66	973	166
DNBOUND STATISTICS	212	1823	53	2088	157	87	244	230	706	76	1012	79
TOTAL	432	3508	109	4049	266	241	507	471	1372	142	1985	246
DISMAL SWAMP												
DEEP CREEK LOCK		*** ONLY FIRST MONTH REPROTED										
UPBOUND STATISTICS	0	1	0	1	0	0	0	0	1	0	1	0
DNBOUND STATISTICS	0	12	0	12	0	0	0	0	7	0	7	0
TOTAL	0	13	0	13	0	0	0	0	8	0	8	0
SOUTH MILLS LOCK		***										
UPBOUND STATISTICS	0	6	0	6	0	0	0	0	4	0	4	0
DNBOUND STATISTICS	0	3	0	3	0	0	0	0	2	0	2	0
TOTAL	0	9	0	9	0	0	0	0	6	0	6	0

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME				DIVISION NAME				MONTHS REPORTED											
E4	NORFOLK				NORTH ATLANTIC				7/85				8/85				9/85			
												ALL TIMES EXPRESSED IN MINUTES								
				LOCK PROCESSING TIME (MIN.)								:	DELAYED	DELAY	DELAY	DELAY				
APPROACH				ENTRY		CHAMBER		EXIT		:	TOWS	TIME	AVG	MAX						
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX		
ATLANT INTRCOASTAL																				
GREAT BRIDGE GUARD LOCK				1	3	34	1	4	29	1	5	35	1	4	25	432	1890	4.3	43	
DISMAL SWAMP																				
DEEP CREEK LOCK				5	5	5	5	5	5	10	10	10	5	5	5	0	0	0.0	5	
SOUTH MILLS LOCK				4	4	4	5	5	5	10	10	10	5	5	6	0	0	0.0	75	

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F1	BUFFALO	NORTH CENTRAL	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
BLK ROCK CH/TONAWANDA	01-BLACK ROCK LOCK	0650/0070/21.6

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME							MONTHS REPORTED				
F1	BUFFALO	NORTH CENTRAL							7/85	8/85		9/85	
-----													
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)	
(NAV, OPN, ETC)													

## BLK ROCK CH/TONAWANDA

BLACK ROCK LOCK	***												
UPBOUND STATISTICS	17	4252	18	4287	17	0	17	381	788	28	1197	0	
DNBOUND STATISTICS	30	3933	7	3970	4	29	33	63	975	23	1061	196	
TOTAL	47	8185	25	8257	21	29	50	444	1763	51	2258	196	



TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F2	CHICAGO	NORTH CENTRAL	7/85	8/85	9/85

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RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CHICAGO HARBOR	01-CHICAGO LOCK	0600/0080/21.5

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NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD



TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
F3	DETROIT	NORTH CENTRAL	7/85	8/85 9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
FOX RIVER	11-DE PERE LOCK & DAM	0146/0036/ 6.0
	12-LITTLE KAUKAUNA LOCK & DAM	0146/0036/ 6.0
	13-RAPIDE CROCHE LOCK & DAM	0146/0036/ 6.0
	21-KAUKAUNA LOCK 1	0144/0035/ 6.0
	22-KAUKAUNA LOCK 2	0144/0035/ 6.0
	23-KAUKAUNA LOCK 3	0144/0031/ 6.0
	24-KAUKAUNA LOCK 4	0144/0037/ 6.0
	25-KAUKAUNA LOCK 5	0144/0036/ 6.0
	32-LITTLE CHUTE LOCK 2	0147/0035/ 6.0
	33-LITTLE CHUTE COMB LOCKS UPPER	0144/0036/ 6.0
	34-LITTLE CHUTE COMB LOCKS LOWER	0147/0035/ 6.0
	35-CEDARS LOCK & DAM	0144/0035/ 6.0
	41-APPLETON LOCK 1	0145/0034/ 6.0
	42-APPLETON LOCK 2	0145/0035/ 6.0
	43-APPLETON LOCK 3	0144/0035/ 6.0
	44-APPLETON LOCK 4	0144/0035/ 6.0
	51-MENASHA LOCK & DAM	0144/0034/ 6.0
THE INLAND ROUTE	61-ALANSON LOCK	0066/0018/ 7.0
ST MARYS RIVER	01-MACARTHUR LOCK	0800/0080/31.0
	02-NEW POE LOCK	1200/0110/32.0
	03-DAVIS LOCK00	1350/0080/23.0
	04-SABIN LOCK00	1350/0080/23.0

NO DATA RECORDED ON SUMMARY FILE FOR THIS PERIOD

NO DATA RECORDED ON LOCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED 7/85 8/85 9/85
<hr/>			
RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)	
ILLINOIS	01-THOMAS J O'BRIEN	1000/0110/12.0	
	02-LOCKPORT LOCK	0600/0110/12.0	
	03-BRANDON ROAD LOCK & DAM	0600/0110/12.0	
	04-DRESDEN ISLAND LOCK & DAM	0600/0110/12.0	
	05-MARSELLES LOCK & DAM	0600/0110/12.0	
	06-STARVED ROCK LOCK & DAM	0600/0110/12.0	
	07-PEORIA LOCK & DAM	0600/0110/12.0	
	08-LAGRANGE LOCK & DAM	0600/0110/12.0	
MISSISSIPPI RIVER	11-LOCK & DAM 11	0600/0110/10.0	
	12-LOCK & DAM 12	0600/0110/10.0	
	13-LOCK & DAM 13	0600/0110/10.0	
	14-LOCK & DAM 14	0600/0110/10.0	
	14-LOCK & DAM 14 AUXILIARY 1	0320/0080/10.0	
	15-LOCK & DAM 15	0600/0110/10.0	
	15-LOCK & DAM 15 AUXILIARY 1	0360/0110/10.0	
	16-LOCK & DAM 16	0600/0110/10.0	
	17-LOCK & DAM 17	0600/0110/10.0	
	18-LOCK & DAM 18	0600/0110/10.0	
	19-LOCK & DAM 19	1200/0110/10.0	
	19-LOCK & DAM 19 AUXILIARY 1	1350/0110/10.0	
	20-LOCK & DAM 20	0600/0110/10.0	
	21-LOCK & DAM 21	0600/0110/10.0	
	22-LOCK & DAM 22	0600/0110/10.0	

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND		DIVISION NAME NORTH CENTRAL				MONTHS REPORTED							
			7/85			8/85			9/85					
RIVER/LOCK NAME			TOMS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
			(NAV, OPN, ETC)											
ILLINOIS														
THOMAS J O'BRIEN			XXX											
UPBOUND STATISTICS			306	4440	55	4801	299	590	889	359	1192	9	1560	870
DNBOUND STATISTICS			295	4434	50	4779	405	461	866	345	1085	13	1443	681
TOTAL			601	8874	105	9580	704	1051	1755	704	2277	22	3003	1551
LOCKPORT LOCK			XXX											
UPBOUND STATISTICS			509	215	68	792	467	1962	2429	534	60	0	594	2872
DNBOUND STATISTICS			522	319	63	904	1553	885	2438	549	97	0	646	1299
TOTAL			1031	534	131	1696	2020	2847	4867	1083	157	0	1240	4172
BRANDON ROAD LOCK & DAM			XXX											
UPBOUND STATISTICS			506	313	74	893	483	2003	2486	577	126	0	703	2945
DNBOUND STATISTICS			499	354	79	932	1505	954	2459	555	142	0	697	1410
TOTAL			1005	667	153	1825	1988	2957	4945	1132	268	0	1400	4355
DRESDEN ISLAND LOCK & DAM			XXX											
UPBOUND STATISTICS			422	750	28	1200	550	2089	2639	511	312	5	828	3144
DNBOUND STATISTICS			420	814	33	1267	1526	1110	2636	509	335	3	847	1777
TOTAL			842	1564	61	2467	2076	3199	5275	1020	647	8	1675	4921
MARSELLES LOCK & DAM			XXX											
UPBOUND STATISTICS			381	777	25	1183	622	1973	2595	490	312	19	821	3111
DNBOUND STATISTICS			390	839	24	1253	1396	1275	2671	496	348	15	859	2017
TOTAL			771	1616	49	2436	2018	3248	5266	986	660	34	1680	5128
STARVED ROCK LOCK & DAM			XXX											
UPBOUND STATISTICS			391	846	19	1256	758	2003	2761	506	326	8	840	3164
DNBOUND STATISTICS			396	894	18	1308	1363	1467	2830	502	403	14	919	2297
TOTAL			787	1740	37	2564	2121	3470	5591	1008	729	22	1759	5462
PEORIA LOCK & DAM			XXX											
UPBOUND STATISTICS			407	508	30	945	1075	2376	3451	590	257	20	867	3772
DNBOUND STATISTICS			418	627	20	1065	1394	2055	3449	579	352	25	956	3070
TOTAL			825	1135	50	2010	2469	4431	6900	1169	609	45	1823	6842
LAGRANGE LOCK & DAM			XXX											
UPBOUND STATISTICS			368	418	6	792	1336	1960	3296	544	200	7	751	3212
DNBOUND STATISTICS			388	545	12	945	811	2501	3312	562	267	4	933	3670
TOTAL			756	963	18	1737	2147	4461	6608	1106	467	11	1684	6882

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED									
			7/85			8/85			9/85			
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
MISSISSIPPI RIVER												
LOCK & DAM 11	***											
UPBOUND STATISTICS	244	1436	12	1692	1345	1232	2577	323	701	8	1032	1801
DNBOUND STATISTICS	237	1472	17	1726	131	2424	2555	313	716	10	1039	3479
TOTAL	481	2908	29	3418	1476	3656	5132	636	1417	18	2071	5280
LOCK & DAM 12	***											
UPBOUND STATISTICS	241	1269	12	1522	1321	1377	2698	334	687	6	1027	2008
DNBOUND STATISTICS	236	1273	11	1520	161	2537	2698	324	732	11	1067	3604
TOTAL	477	2542	23	3042	1482	3914	5396	658	1419	17	2094	5612
LOCK & DAM 13	***											
UPBOUND STATISTICS	238	1398	12	1648	1298	1370	2668	337	628	4	969	2007
DNBOUND STATISTICS	238	1363	15	1616	166	2550	2716	338	632	12	982	3623
TOTAL	476	2761	27	3264	1464	3920	5384	675	1260	16	1951	5630
LOCK & DAM 14	***											
UPBOUND STATISTICS	324	700	14	1038	1487	1643	3130	487	335	6	878	2412
DNBOUND STATISTICS	330	643	13	986	244	2994	3238	489	405	11	905	4081
TOTAL	654	1343	27	2024	1731	4637	6368	976	790	17	1783	6493
LOCK & DAM 14 AUXILIARY 1	***											
UPBOUND STATISTICS	0	2517	0	2517	0	0	0	2	574	0	576	0
DNBOUND STATISTICS	0	2554	1	2557	0	0	0	4	564	2	570	0
TOTAL	0	5071	1	5074	0	0	0	6	1138	2	1146	0
LOCK & DAM 15	***											
UPBOUND STATISTICS	313	47	25	385	1292	1721	3013	547	29	9	585	2547
DNBOUND STATISTICS	307	30	27	364	305	2819	3124	539	25	12	576	3989
TOTAL	620	77	52	749	1597	4540	6137	1086	54	21	1161	6537
LOCK & DAM 15 AUXILIARY 1	***											
UPBOUND STATISTICS	44	2007	32	2083	28	34	62	86	676	5	767	38
DNBOUND STATISTICS	56	2095	33	2184	64	15	79	98	717	5	820	17
TOTAL	100	4102	65	4267	92	49	141	184	1393	10	1587	55
LOCK & DAM 16	***											
UPBOUND STATISTICS	351	534	28	913	1353	1897	3250	503	384	15	902	2818
DNBOUND STATISTICS	356	577	35	968	408	2976	3384	510	421	14	945	4207
TOTAL	707	1111	63	1881	1761	4873	6634	1013	805	29	1847	7025

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED									
			7/85			8/85			9/85			
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
-----												
MISSISSIPPI RIVER												
LOCK & DAM 17	***											
UPBOUND STATISTICS	309	354	10	673	1317	2086	3403	461	301	18	780	3075
DNBOUND STATISTICS	316	396	7	719	438	3040	3478	452	330	23	805	4274
TOTAL	625	750	17	1392	1755	5126	6881	913	631	41	1585	7350
LOCK & DAM 18	***											
UPBOUND STATISTICS	315	581	20	916	1387	2116	3503	459	404	13	876	3126
DNBOUND STATISTICS	312	561	19	892	412	3099	3511	447	419	17	883	4359
TOTAL	627	1142	39	1808	1799	5215	7014	906	823	30	1759	7485
LOCK & DAM 19	***											
UPBOUND STATISTICS	314	336	22	672	1488	2168	3656	334	154	9	497	3196
DNBOUND STATISTICS	311	384	15	710	365	3256	3621	323	177	9	509	4577
TOTAL	625	720	37	1382	1853	5424	7277	657	331	18	1006	7773
LOCK & DAM 19 AUXILIARY 1	***	NO DATA RECORDED FOR THIS LOCK										
LOCK & DAM 20	***											
UPBOUND STATISTICS	327	341	51	719	1536	2151	3687	527	251	17	795	3176
DNBOUND STATISTICS	327	354	50	731	337	3373	3710	529	252	14	795	4750
TOTAL	654	695	101	1450	1873	5524	7397	1056	503	31	1590	7926
LOCK & DAM 21	***											
UPBOUND STATISTICS	321	411	34	766	1648	2100	3748	509	274	17	800	3138
DNBOUND STATISTICS	329	419	23	771	269	3532	3801	513	288	16	817	4959
TOTAL	650	830	57	1537	1917	5632	7549	1022	562	33	1617	8098
LOCK & DAM 22	***											
UPBOUND STATISTICS	345	438	15	798	1767	2108	3875	535	234	14	783	3124
DNBOUND STATISTICS	354	460	12	826	248	3658	3906	537	275	13	825	5185
TOTAL	699	898	27	1624	2015	5766	7781	1072	509	27	1608	8309

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

ERO F4	DISTRICT NAME				DIVISION NAME								MONTHS REPORTED			
	ROCK ISLAND				NORTH CENTRAL								7/85			
													8/85			
ALL TIMES EXPRESSED IN MINUTES																
APPROACH				LOCK PROCESSING TIME (MIN.)								:	DELAYED	DELAY	DELAY	DELAY
												:	TOWS	TIME	AVG	MAX
MIN AVG MAX				:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:
ILLINOIS																
THOMAS J O'BRIEN	1	2	82	:	1	1	26	:	2	15	132	:	1	1	14	:
LOCKPORT LOCK	1	9	80	:	1	12	132	:	2	40	177	:	1	11	121	:
BRANDON ROAD LOCK & DAM	1	9	60	:	1	8	50	:	3	21	103	:	1	9	389	:
DRESDEN ISLAND LOCK & DAM	1	6	277	:	1	7	39	:	1	16	161	:	1	8	70	:
MARSELLES LOCK & DAM	1	7	242	:	1	7	91	:	1	19	49	:	1	11	150	:
STARVED ROCK LOCK & DAM	1	5	51	:	1	7	35	:	1	16	49	:	1	10	71	:
PEORIA LOCK & DAM	1	5	77	:	1	9	397	:	1	11	432	:	1	13	70	:
LAGRANGE LOCK & DAM	1	8	271	:	1	9	392	:	1	8	179	:	1	15	120	:
MISSISSIPPI RIVER																
LOCK & DAM 11	1	4	74	:	1	4	40	:	1	10	192	:	1	7	50	:
LOCK & DAM 12	1	5	404	:	1	4	26	:	1	7	136	:	1	7	65	:
LOCK & DAM 13	1	5	45	:	1	4	37	:	2	8	68	:	1	7	74	:
LOCK & DAM 14	1	5	60	:	1	5	37	:	1	8	126	:	1	10	138	:
LOCK & DAM 14 AUXILIARY 1	1	1	55	:	1	1	12	:	5	12	37	:	1	1	10	:
				:				:				:	0	0	0.0	:
				:				:				:				:

ERDC  
F4

DIVISION NAME  
NORTH CENTRAL

7/85

MONTHS REPORTED  
8/85

9/85

													ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			LOCK PROCESSING TIME (MIN.)									DELATED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLs)
				ENTRY			CHAMBER			EXIT						
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
MISSISSIPPI RIVER																
LOCK & DAM 15	1	10	101	1	9	35	1	11	367	1	16	59	293	33589	54.1	636
LOCK & DAM 15 AUXILIARY 1	1	1	22	1	1	17	1	12	75	1	1	122	20	175	1.7	81
LOCK & DAM 16	1	6	75	1	6	38	1	9	58	1	11	122	395	33828	47.8	1490
LOCK & DAM 17	1	9	108	1	6	28	2	9	45	1	11	43	334	31991	51.1	1440
LOCK & DAM 18	1	6	95	1	6	27	1	8	435	1	11	406	341	31153	49.6	577
LOCK & DAM 19	1	14	85	1	7	420	1	16	76	1	7	23	253	15034	24.0	258
LOCK & DAM 19 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK															
LOCK & DAM 20	1	5	61	1	7	29	1	7	67	1	13	156	298	26729	40.8	322
LOCK & DAM 21	1	8	346	1	7	30	1	7	388	1	13	82	346	33846	52.0	496
LOCK & DAM 22	1	12	103	1	8	33	1	7	49	1	15	93	428	55307	79.1	871

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/85 THROUGH 9/85  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F5	ST PAUL	NORTH CENTRAL	7/85	8/85	9/85
<hr/>					
RIVER	LCODE-LOCK NAME		LEN/WID/DRAFT (FT/FT/FT)		
MISSISSIPPI RIVER	01-LOCK & DAM 1 MAIN CHBR 1		0400/0056/11.0		
	01-LOCK & DAM 1 MAIN CHBR 2		0400/0056/11.0		
	02-LOCK & DAM 2		0600/0110/11.0		
	02-LOCK & DAM 2 AUXILIARY 1		0500/0110/11.0		
	03-LOCK & DAM 3		0600/0110/11.0		
	04-LOCK & DAM 4		0600/0110/11.0		
	05-LOCK & DAM 5		0600/0110/11.0		
	06-LOCK & DAM 6		0600/0110/11.0		
	07-LOCK & DAM 7		0600/0110/11.0		
	08-LOCK & DAM 8		0600/0110/11.0		
	09-LOCK & DAM 9		0600/0110/11.0		
	10-LOCK & DAM 10		0600/0110/11.0		
	51-ST ANTHONY FALLS UPPER L & D		0400/0056/11.0		
	52-ST ANTHONY FALLS LOWER L & D		0400/0056/11.0		
	55-LOCK & DAM 5A		0600/0110/11.0		



TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC F5	DISTRICT NAME ST PAUL	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED									
			7/85		8/85		9/85					
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
MISSISSIPPI RIVER												
LOCK & DAM 1 MAIN CHBR 1	***											
UPBOUND STATISTICS	243	1572	18	1833	205	239	444	276	537	6	919	330
DNBOUND STATISTICS	244	1608	22	1874	198	242	440	277	608	6	891	347
TOTAL	487	3180	40	3707	403	481	884	553	1245	12	1810	678
LOCK & DAM 1 MAIN CHBR 2	***	NO DATA RECORDED FOR THIS LOCK										
LOCK & DAM 2	***											
UPBOUND STATISTICS	306	2510	3	2819	2163	663	2826	384	847	9	1240	996
DNBOUND STATISTICS	301	2550	5	2856	72	2676	2748	375	857	11	1243	3836
TOTAL	607	5060	8	5675	2235	3339	5574	759	1704	20	2483	4832
LOCK & DAM 2 AUXILIARY 1	***	NO DATA RECORDED FOR THIS LOCK										
LOCK & DAM 3	***											
UPBOUND STATISTICS	241	3727	13	3981	1753	649	2402	302	1183	18	1503	975
DNBOUND STATISTICS	243	3793	12	4048	77	2322	2399	297	1201	19	1517	3376
TOTAL	484	7520	25	8029	1830	2971	4801	599	2384	37	3020	4352
LOCK & DAM 4	***											
UPBOUND STATISTICS	241	2784	2	3027	1780	682	2462	297	1028	34	1359	1016
DNBOUND STATISTICS	241	2864	294	3399	73	2379	2452	298	1023	34	1355	3457
TOTAL	482	5648	296	6426	1853	3061	4914	595	2051	68	2714	4473
LOCK & DAM 5	***											
UPBOUND STATISTICS	239	2130	6	2375	1726	713	2439	304	840	32	1176	1031
DNBOUND STATISTICS	243	2162	8	2413	77	2360	2437	309	829	31	1169	3416
TOTAL	482	4292	14	4788	1803	3073	4876	613	1669	63	2345	4447
LOCK & DAM 6	***											
UPBOUND STATISTICS	242	2342	4	2588	1724	791	2515	313	1002	29	1344	1171
DNBOUND STATISTICS	245	2347	5	2597	71	2461	2532	309	1111	34	1454	3585
TOTAL	487	4689	9	5185	1795	3252	5047	622	2113	63	2798	4757
LOCK & DAM 7	***											
UPBOUND STATISTICS	242	3413	12	3667	1722	791	2513	322	1190	24	1536	1161
DNBOUND STATISTICS	245	3342	11	3598	71	2460	2531	322	1245	27	1594	3582
TOTAL	487	6755	23	7265	1793	3251	5044	644	2435	51	3130	4743

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC F5	DISTRICT NAME ST PAUL	DIVISION NAME NORTH CENTRAL					MONTHS REPORTED						
		7/85			8/85		9/85						
RIVER/LOCK NAME		TOWS	VESSL RECFTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OFN, ETC)	TONNAGE (KTONS)
MISSISSIPPI RIVER													
LOCK & DAM 8		***											
UPBOUND STATISTICS		237	1604	2	1843	1604	924	2528	286	870	27	1183	1357
DNBOUND STATISTICS		236	1662	5	1903	81	2453	2534	287	876	24	1187	3540
TOTAL		473	3266	7	3746	1685	3377	5062	573	1746	51	2370	4897
LOCK & DAM 9		***											
UPBOUND STATISTICS		228	1800	2	2030	1358	1132	2490	278	818	17	1113	1655
DNBOUND STATISTICS		223	1735	3	1961	110	2320	2432	271	826	23	1120	3356
TOTAL		451	3535	5	3991	1470	3452	4922	549	1644	40	2233	5011
LOCK & DAM 10		***											
UPBOUND STATISTICS		239	1845	6	2090	1454	1145	2599	302	918	7	1227	1673
DNBOUND STATISTICS		236	1920	9	2165	122	2456	2578	297	967	9	1273	3513
TOTAL		475	3765	15	4255	1576	3601	5177	599	1885	16	2500	5187
ST ANTHONY FALLS UPPER L & D		***											
UPBOUND STATISTICS		176	834	18	1028	192	100	292	195	410	7	612	144
DNBOUND STATISTICS		175	902	18	1095	65	220	285	194	414	6	614	317
TOTAL		351	1736	36	2123	257	320	577	389	824	13	1226	462
ST ANTHONY FALLS LOWER L & D		***											
UPBOUND STATISTICS		243	824	103	1170	203	240	443	259	412	6	677	335
DNBOUND STATISTICS		243	906	14	1163	199	237	436	256	410	6	672	341
TOTAL		486	1730	117	2333	402	477	879	515	822	12	1349	677
LOCK & DAM 5A		***											
UPBOUND STATISTICS		241	2832	5	3078	1733	705	2438	392	1023	30	1445	1037
DNBOUND STATISTICS		244	2829	8	3081	77	2370	2447	388	1115	30	1533	3434
TOTAL		485	5661	13	6159	1810	3075	4885	780	2138	60	2978	4472

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC F5	DISTRICT NAME ST PAUL			DIVISION NAME NORTH CENTRAL									MONTHS REPORTED					
													7/85			8/85		9/85
	ALL TIMES EXPRESSED IN MINUTES																	
	APPROACH			LOCK PROCESSING TIME (MIN.)									: DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLs)		
ENTRY				CHAMBER			EXIT											
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:				
MISSISSIPPI RIVER																		
LOCK & DAM 1 MAIN CHBR 1	1	2	42	1	3	16	2	11	30	1	3	62	64	1010	2.0	123		
LOCK & DAM 1 MAIN CHBR 2	NO DATA RECORDED FOR THIS LOCK																	
LOCK & DAM 2	1	4	70	1	6	28	4	8	30	1	6	46	312	19061	31.4	310		
LOCK & DAM 2 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK																	
LOCK & DAM 3	1	4	116	1	5	55	1	5	33	1	6	42	263	11582	23.9	358		
LOCK & DAM 4	1	4	98	1	5	25	2	6	26	1	6	81	272	13953	28.9	688		
LOCK & DAM 5	1	3	42	1	4	35	2	8	57	1	6	67	243	12699	26.3	340		
LOCK & DAM 6	1	4	75	1	4	26	2	5	19	1	5	71	263	14366	29.4	601		
LOCK & DAM 7	1	3	109	1	4	27	4	6	16	1	5	53	277	14977	30.7	391		
LOCK & DAM 8	1	4	60	1	4	27	4	7	57	1	7	62	249	14229	30.0	624		
LOCK & DAM 9	1	4	105	1	4	55	4	6	42	1	7	52	165	12891	28.5	273		
LOCK & DAM 10	1	3	115	1	4	28	3	6	37	1	6	53	215	12803	26.9	270		
ST ANTHONY FALLS UPPER L & D	1	2	21	1	3	20	4	9	27	1	2	36	20	320	0.9	76		
ST ANTHONY FALLS LOWER L & D	1	2	22	1	3	16	4	11	24	1	2	28	71	1154	2.3	79		
LOCK & DAM 5A	1	3	60	1	3	30	2	6	28	1	5	37	254	12748	26.2	603		

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G2	PORTLAND	NORTH PACIFIC	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
COLUMBIA RIVER	01-BONNEVILLE LOCK & DAM	0500/0075/15.0
	02-THE DALLES DAM	0675/0086/15.0
	03-JOHN DAY LOCK & DAM	0675/0086/15.0
WILLAMETTE RIVER	11-WILLAMETTE FALLS LOCKS 1 - 4	0210/0040/ 6.5
	15-WILLAMETTE FALLS GUARD LOCK	0210/0040/ 6.5

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC G2	DISTRICT NAME PORTLAND	DIVISION NAME NORTH PACIFIC	MONTHS REPORTED											
			7/85		8/85		9/85							
RIVER/LOCK NAME			TOWS	VESSEL RECRTN	VESSEL OTHER	VESSEL TOTAL	BARGE EMPTY	BARGE FULL	BARGE TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER (NAV, OPN, ETC)	LCKGES TOTAL	TONNAGE (KTONS)
COLUMBIA RIVER														
BONNEVILLE LOCK & DAM			###											
UPBOUND STATISTICS			111	1	1	44	11	135	245	374	112	86	572	383
DNBOUND STATISTICS			111	1	1	44	11	135	245	403	94	104	601	1460
TOTAL			44	1	1	44	11	135	245	777	206	190	1173	1843
THE DALLES DAM			###											
UPBOUND STATISTICS			154	1	1	154	16	226	591	159	32	57	248	547
DNBOUND STATISTICS			154	1	1	154	16	226	591	146	43	62	251	1249
TOTAL			298	1	1	298	41	738	1164	305	75	119	499	1796
JOHN DAY LOCK & DAM			###											
UPBOUND STATISTICS			154	15	10	179	358	232	590	152	26	52	230	638
DNBOUND STATISTICS			154	15	10	179	358	232	590	151	38	51	240	1154
TOTAL			310	146	19	475	427	732	1159	303	64	103	470	1792
WILLAMETTE RIVER														
WILLAMETTE FALLS LOCKS 1 - 4			###											
UPBOUND STATISTICS			157	276	17	450	21	218	239	155	309	0	464	51
DNBOUND STATISTICS			114	323	56	493	8	171	179	140	277	0	417	48
TOTAL			271	599	73	943	29	389	418	295	586	0	881	100
WILLAMETTE FALLS GUARD LOCK			###											
UPBOUND STATISTICS			147	213	157	517	25	141	166	73	271	164	508	28
DNBOUND STATISTICS			108	271	197	576	7	103	110	36	252	178	466	30
TOTAL			255	484	354	1093	32	244	276	109	523	342	974	58

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
G2	PORTLAND	NORTH PACIFIC	7/85 8/85 9/85

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELATED	DELAY	DELAY	DELAY
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	TOWS	TIME	AVG	MAX
COLUMBIA RIVER																
BONNEVILLE LOCK & DAM	1	6	53	1	7	58	7	23	68	1	4	27	434	33532	75.3	630
THE DALLES DAM	1	5	65	1	5	30	5	22	65	1	5	28	259	3355	10.8	160
JOHN DAY LOCK & DAM	3	5	55	1	5	34	15	25	91	1	4	10	310	2002	6.4	110
WILLAMETTE RIVER																
WILLAMETTE FALLS LOCKS 1 - 4	1	1	3	1	1	61	1	33	91	1	2	40	270	274	1.0	11
WILLAMETTE FALLS GUARD LOCK	1	1	2	1	1	13	1	1	5	1	1	11	254	255	1.0	1441

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G3	SEATTLE	NORTH PACIFIC	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
LAKE WASHINGTON SHP CA	01-HIRAM M CHITTENDEN LOCKS	0760/0080/30.0
	01-HIRAM M CHITTENDEN LOCKS AUX1	0150/0028/25.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G4	WALLA WALLA	NORTH PACIFIC	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
COLUMBIA RIVER	24-MCNARY LOCK & DAM	0675/0086/14.0
SNAKE RIVER	01-ICE HARBOR LOCK & DAM	0670/0086/14.0
	02-LOWER MONUMENTAL LOCK & DAM	0670/0086/14.0
	03-LITTLE GOOSE LOCK & DAM	0670/0086/14.0
	04-LOWER GRANITE LOCK & DAM	0670/0086/14.0



TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC G4	DISTRICT NAME WALLA WALLA	DIVISION NAME NORTH PACIFIC	MONTHS REPORTED									
			7/85			8/85			9/85			
-----												
RIVER/LOCK NAME	TOWS	VESSL RECTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LCKGES COMMER	LCKGES RECTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
-----												
(NAV, OPN, ETC)												
-----												
COLUMBIA RIVER												
MCNARY LOCK & DAM	xxx											
UPBOUND STATISTICS	154	164	6	324	289	243	532	176	91	4	271	401
DNBOUND STATISTICS	152	176	10	338	85	436	521	172	99	6	277	993
TOTAL	306	340	16	662	374	679	1053	348	190	10	548	1394
SNAKE RIVER												
ICE HARBOR LOCK & DAM	xxx											
UPBOUND STATISTICS	109	566	17	692	223	47	270	146	251	5	402	33
DNBOUND STATISTICS	109	566	19	694	5	259	264	142	228	6	376	580
TOTAL	218	1132	36	1386	228	306	534	288	479	11	778	613
LOWER MONUMENTAL LOCK & DAM	xxx											
UPBOUND STATISTICS	77	151	1	229	181	48	229	96	83	1	180	33
DNBOUND STATISTICS	75	147	3	225	7	215	222	94	70	2	166	450
TOTAL	152	298	4	454	188	263	451	190	153	3	346	483
LITTLE GOOSE LOCK & DAM	xxx											
UPBOUND STATISTICS	76	114	1	191	175	45	220	95	76	9	180	32
DNBOUND STATISTICS	74	120	1	195	7	207	214	94	76	9	179	421
TOTAL	150	234	2	386	182	252	434	189	152	18	359	453
LOWER GRANITE LOCK & DAM	xxx											
UPBOUND STATISTICS	73	292	2	367	124	47	171	102	175	1	278	33
DNBOUND STATISTICS	70	295	3	368	7	159	166	101	161	2	264	295
TOTAL	143	587	5	735	131	206	337	203	336	3	542	328

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC G4	DISTRICT NAME WALLA WALLA			DIVISION NAME NORTH PACIFIC								MONTHS REPORTED 7/85                      8/85                      9/85			

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
H1	HUNTINGTON	OHIO RIVER	7/85	8/85 9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
KANAWHA RIVER	01-WINFIELD LOCKS & DAM MAIN 1	0360/0056/12.0
	01-WINFIELD LOCKS & DAM MAIN 2	0360/0056/12.0
	02-MARNET LOCKS & DAM MAIN 1	0360/0056/12.0
	02-MARNET LOCKS & DAM MAIN 2	0360/0056/12.0
	03-LONDON LOCKS & DAM MAIN 1	0360/0056/12.0
	03-LONDON LOCKS & DAM MAIN 2	0360/0056/12.0
OHIO RIVER	21-BELLEVILLE LOCKS & DAM	1200/0110/12.0
	21-BELLEVILLE LOCKS & DAM AUX 1	0600/0110/12.0
	22-RACINE LOCKS & DAM	1200/0110/12.0
	22-RACINE LOCKS & DAM AUX 1	0600/0110/12.0
	23-GALLIPOLIS LOCKS & DAM	0600/0110/12.0
	23-GALLIPOLIS LOCKS & DAM AUX 1	0360/0110/12.0
	24-GREENUP LOCKS & DAM	1200/0110/12.0
	24-GREENUP LOCKS & DAM AUX 1	0600/0110/12.0
	25-CAPT ANT MELDAHL LOCKS & DAM	1200/0110/12.0
	25-CAPT ANT MELDAHL LK&DAM AUX 1	0600/0110/12.0
	72-WILLOW ISLAND LOCKS & DAM	1200/0110/12.0
	72-WILLOW ISLAND LOCKS & DAM AUX	0600/0110/12.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER			MONTHS REPORTED								9/85
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
KANAWHA RIVER													
WINFIELD LOCKS & DAM MAIN 1		xxx											
UPBOUND STATISTICS		282	49	22	353	1060	588	1648	1168	78	7	1253	957
DNBOUND STATISTICS		255	47	12	314	248	1262	1510	977	63	0	1040	1470
TOTAL		537	96	34	667	1308	1850	3158	2145	141	7	2293	2428
WINFIELD LOCKS & DAM MAIN 2		xxx											
UPBOUND STATISTICS		254	47	17	318	1149	350	1499	948	106	0	1054	468
DNBOUND STATISTICS		286	79	25	390	506	1102	1608	1091	101	7	1199	1364
TOTAL		540	126	42	708	1655	1452	3107	2039	207	7	2253	1832
MARMET LOCKS & DAM MAIN 1		xxx											
UPBOUND STATISTICS		159	136	15	310	678	86	764	497	177	2	676	101
DNBOUND STATISTICS		217	159	18	394	70	985	1055	705	227	3	935	1278
TOTAL		376	295	33	704	748	1071	1819	1202	404	5	1611	1380
MARMET LOCKS & DAM MAIN 2		xxx											
UPBOUND STATISTICS		233	257	34	524	939	107	1046	662	293	2	957	125
DNBOUND STATISTICS		167	220	30	417	83	625	708	430	244	2	676	765
TOTAL		400	477	64	941	1022	732	1754	1092	537	4	1633	890
LONDON LOCKS & DAM MAIN 1		xxx	ONLY SECOND AND THIRD MONTHS REPORTED										
UPBOUND STATISTICS		61	4	6	71	204	0	204	195	11	0	206	0
DNBOUND STATISTICS		31	7	6	44	0	79	79	78	14	0	92	116
TOTAL		92	11	12	115	204	79	283	273	25	0	298	116
LONDON LOCKS & DAM MAIN 2		xxx											
UPBOUND STATISTICS		116	49	9	174	337	8	345	287	109	0	396	11
DNBOUND STATISTICS		148	41	11	200	12	447	459	393	98	0	491	645
TOTAL		264	90	20	374	349	455	804	680	207	0	887	656
OHIO RIVER													
BELLEVILLE LOCKS & DAM		xxx											
UPBOUND STATISTICS		353	5	6	364	700	3108	3808	353	2	1	356	4508
DNBOUND STATISTICS		337	8	8	353	1872	2002	3874	338	5	0	343	3024
TOTAL		690	13	14	717	2572	5110	7682	691	7	1	699	7532

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER	MONTHS REPORTED										
			7/85			8/85			9/85				
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
OHIO RIVER													
BELLEVILLE LOCKS & DAM AUX 1		***											
UPBOUND STATISTICS		46	265	5	316	25	115	140	53	175	1	229	136
DNBOUND STATISTICS		60	291	8	359	174	29	203	69	180	3	252	34
TOTAL		106	556	13	675	199	144	343	122	355	4	481	170
RACINE LOCKS & DAM		***											
UPBOUND STATISTICS		387	5	6	398	1076	3077	4153	391	3	3	397	4501
DNBOUND STATISTICS		379	5	7	391	1846	2345	4191	380	3	3	386	3314
TOTAL		766	10	13	789	2922	5422	8344	771	6	6	783	7815
RACINE LOCKS & DAM AUX 1		***											
UPBOUND STATISTICS		49	162	9	220	69	81	150	55	112	6	173	118
DNBOUND STATISTICS		45	169	10	224	103	36	109	56	122	5	183	38
TOTAL		94	331	19	444	172	117	289	111	234	11	356	157
GALLIPOLIS LOCKS & DAM		***											
UPBOUND STATISTICS		386	39	22	447	948	2655	3603	641	29	8	678	4018
DNBOUND STATISTICS		395	43	32	470	1519	2316	3835	669	37	4	710	3344
TOTAL		781	82	54	917	2467	4971	7438	1310	66	12	1388	7362
GALLIPOLIS LOCKS & DAM AUX 1		***	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS		65	53	13	131	117	377	494	156	65	4	225	595
DNBOUND STATISTICS		47	46	11	104	179	218	397	133	50	2	185	304
TOTAL		112	99	24	235	296	595	891	289	115	6	410	900
GREENUP LOCKS & DAM		***											
UPBOUND STATISTICS		549	17	19	585	3903	1854	5757	554	5	2	561	2893
DNBOUND STATISTICS		558	17	20	595	708	5256	5964	568	3	2	573	7868
TOTAL		1107	34	39	1180	4611	7110	11721	1122	8	4	1134	10761
GREENUP LOCKS & DAM AUX 1		***											
UPBOUND STATISTICS		81	472	36	589	141	89	230	120	240	2	362	130
DNBOUND STATISTICS		78	455	37	570	122	74	196	114	232	2	348	119
TOTAL		159	927	73	1159	263	163	426	234	472	4	710	249
EAST ANT MELDAHL LOCKS & DAM		***											
UPBOUND STATISTICS		534	341	10	885	3655	2073	5728	546	108	3	657	3223
DNBOUND STATISTICS		540	375	5	920	795	5101	5896	548	112	4	664	7664
TOTAL		1074	716	15	1805	4450	7174	11624	1094	220	7	1321	10888

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EFOC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER	MONTHS REPORTED									
			7/85		8/85		9/85					
-----												
RIVER LOCK NAME	TOWS	VESSEL REGSTR	VESSEL OTHER	VESSEL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)												
-----												
OHIO RIVER												
CART ART MELDAHL LK&DAM AUX 1	***	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	31	1001	2	1123	38	44	82	35	334	0	369	67
DNBOUND STATISTICS	27	1045	4	1076	44	50	94	33	341	1	375	68
TOTAL	57	2136	6	2199	82	94	176	68	675	1	744	135
WILLOW ISLAND LOCKS & DAM												
UPBOUND STATISTICS	243	4	1	348	779	2825	3604	345	0	0	345	3970
DNBOUND STATISTICS	327	11	3	341	1700	2012	3712	330	3	0	333	2945
TOTAL	670	15	4	689	2479	4837	7316	675	3	0	678	6916
WILLOW ISLAND LOCKS & DAM AUX												
UPBOUND STATISTICS	63	413	16	492	49	164	213	85	202	37	324	131
DNBOUND STATISTICS	82	435	9	526	165	71	236	97	218	37	352	72
TOTAL	145	848	25	1018	214	235	449	182	420	74	676	203

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER	MONTHS REPORTED															
			7/85				8/85				9/85							
															ALL TIMES EXPRESSED IN MINUTES			
															DELATED	DELA	DELA	DELA
															TOWS	TIME	AVG	MAX
															TOWS	TOWS	TOWS	(ALL VSLS)
KANAWHA RIVER																		
WINFIELD LOCKS & DAM MAIN 1	1	9	95	1	5	46	5	9	50	2	12	222	393	89910	167.4	1143		
WINFIELD LOCKS & DAM MAIN 2	1	8	90	1	5	40	5	9	30	3	12	478	384	89483	165.7	1050		
MARMET LOCKS & DAM MAIN 1	1	9	62	1	5	55	5	8	27	1	8	45	93	8474	22.5	330		
MARMET LOCKS & DAM MAIN 2	1	8	48	1	4	21	5	8	18	1	7	48	88	7400	18.5	315		
LONDON LOCKS & DAM MAIN 1	1	8	125	2	5	20	5	8	21	1	8	29	32	6725	73.0	745		
LONDON LOCKS & DAM MAIN 2	1	7	63	1	4	18	5	8	38	1	8	61	80	17836	67.5	1660		
OHIO RIVER																		
BELLEVILLE LOCKS & DAM	1	17	50	1	10	28	10	12	23	1	9	29	201	6244	9.0	124		
BELLEVILLE LOCKS & DAM AUX 1	1	10	37	1	3	20	6	12	24	1	4	17	6	149	1.4	72		
RACINE LOCKS & DAM	1	16	357	2	12	30	7	11	40	2	10	29	239	13417	17.5	1959		
RACINE LOCKS & DAM AUX 1	1	10	79	2	5	17	6	11	32	1	6	17	3	51	0.5	38		
GALLIPOLIS LOCKS & DAM	1	8	65	2	12	39	5	13	35	1	16	51	608	145338	186.0	1664		
GALLIPOLIS LOCKS & DAM AUX 1	1	6	55	1	9	53	5	13	42	1	9	39	92	156509	1397.4	4035		
GREENUP LOCKS & DAM	1	16	60	2	10	28	5	11	24	1	10	30	498	24743	22.3	260		

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H1	DISTRICT NAME HUNTINGTON			DIVISION NAME OHIO RIVER										MONTHS REPORTED					
														7/85		8/85		9/85	
															ALL TIMES EXPRESSED IN MINUTES				
APPROACH			LOCK PROCESSING TIME (MIN.)										:	DELAYED	DELAY	DELAY	DELAY		
			ENTRY			CHAMBER			EXIT				:	TOWS	TIME	AVG	MAX		
MIN    AVG    MAX			:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	TOWS	TOWS	(ALL VSLS)	
OHIO RIVER																			
GREENUP LOCKS & DAM AUX 1																			
1	7	30		2	5	19		5	11	19		1	5	24		12	272	1.7	63
CAPT ANT MELDAHL LOCKS & DAM																			
1	15	59		1	9	35		8	13	45		1	10	30		562	43905	40.8	460
CAPT ANT MELDAHL LK&DAM AUX																			
1	4	54		1	2	21		7	12	26		1	2	25		5	269	4.7	90
WILLOW ISLAND LOCKS & DAM																			
1	17	50		2	9	24		5	13	27		1	9	26		177	6442	9.6	100
WILLOW ISLAND LOCKS & DAM AU																			
1	9	35		1	4	20		6	12	23		1	5	20		11	265	1.8	50



TABLE 1

PERFORMANCE MONITORING SYSTEM (FMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/85 THROUGH 9/85  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
H2	LOUISVILLE	OHIO RIVER	7/85	8/ 5 9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
GREEN/BARREN RIVER	21-LOCK & DAM 1	0600/0084/12.0
	22-LOCK & DAM 2	0600/0084/12.0
OHIO RIVER	41-MARKLAND LOCKS & DAM	1200/0110/12.0
	41-MARKLAND LOCKS & DAM AUX 1	0600/0110/12.0
	42-MCALPINE LOCKS & DAM	1200/0110/12.0
	42-MCALPINE LOCKS & DAM AUX 1	0600/0110/12.0
	52-LOCK & DAM 52	1200/0110/12.0
	52-LOCK & DAM 52 AUX 1	0600/0110/12.0
	75-CANNELTON LOCK & DAM	1200/0110/12.0
	75-CANNELTON LOCK & DAM AUX	0600/0110/12.0
	76-NEWBURGH LOCK & DAM	1200/0110/12.0
	76-NEWBURGH LOCK & DAM AUX 1	0600/0110/12.0
	77-UNIONTOWN LOCK & DAM	1200/0110/12.0
	77-UNIONTOWN LOCK & DAM AUX 1	0600/0110/12.0
	78-SMITHLAND LOCK & DAM	1200/0110/12.0
	78-SMITHLAND LOCK & DAM AUX 1	1200/0110/12.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H2	DISTRICT NAME	DIVISION NAME					MONTHS REPORTED						
	LOUISVILLE	OHIO RIVER					7/85		8/85			9/85	
-----													
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE	
		RECRTN	OTHER	TOTAL	EMPTY	FULL		TOTAL	COMMER	RECRTN	OTHER		TOTAL
-----													
GREEN/BARREN RIVER													
LOCK & DAM 1	***												
UPEOUND STATISTICS	413	277	8	698	1433	137	1570	422	163	1	586	204	
DNEOUND STATISTICS	404	283	12	699	95	1453	1548	416	157	4	577	2178	
TOTAL	817	560	20	1397	1528	1590	3118	838	320	5	1163	2383	
LOCK & DAM 2	***												
UPEOUND STATISTICS	286	21	10	317	1080	38	1118	294	14	1	309	56	
DNEOUND STATISTICS	285	18	6	309	33	1074	1107	291	11	3	305	1600	
TOTAL	571	39	16	626	1113	1112	2225	585	25	4	614	1656	
OHIO RIVER													
MARKLAND LOCKS & DAM	***												
UPEOUND STATISTICS	173	8	1	182	989	852	1841	174	2	0	176	1319	
DNEOUND STATISTICS	177	7	3	187	246	1652	1898	180	3	3	186	2434	
TOTAL	350	15	4	369	1235	2504	3739	354	5	3	362	3754	
MARKLAND LOCKS & DAM AUX 1	***												
UPEOUND STATISTICS	350	739	8	1097	1653	1486	3139	489	289	16	794	2408	
DNEOUND STATISTICS	347	732	7	1086	503	2775	3278	485	345	12	842	4160	
TOTAL	697	1471	15	2183	2156	4261	6417	974	634	28	1636	6569	
MCALPINE LOCKS & DAM	***												
UPEOUND STATISTICS	529	309	61	899	2089	2897	4986	573	141	8	722	4508	
DNEOUND STATISTICS	535	362	52	949	1019	4020	5039	569	185	9	763	6038	
TOTAL	1064	671	113	1848	3108	6917	10025	1142	326	17	1485	10547	
MCALPINE LOCKS & DAM AUX 1	*** ONLY FIRST AND SECOND MONTHS REPORTED												
UPEOUND STATISTICS	62	8	10	80	204	329	533	98	10	2	110	529	
DNEOUND STATISTICS	72	14	5	91	159	521	680	115	13	4	132	794	
TOTAL	134	22	15	171	363	850	1213	213	23	6	242	1323	
LOCK & DAM 52	***												
UPEOUND STATISTICS	744	4	29	777	4817	3948	8765	690	3	57	750	6075	
DNEOUND STATISTICS	777	0	77	854	1681	7305	8986	714	0	74	788	10556	
TOTAL	1521	4	106	1631	6498	11253	17751	1404	3	131	1538	16632	

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H2	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER					MONTHS REPORTED					
							7/85		8/85		9/85	
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
OHIO RIVER												
LOCK & DAM 52 AUX 1	xxx											
UPBOUND STATISTICS	376	101	123	600	560	726	1286	481	76	14	571	1379
DNBOUND STATISTICS	382	165	110	657	629	631	1260	485	66	18	569	1030
TOTAL	758	266	233	1257	1189	1357	2546	966	142	32	1140	2410
CANNELTON LOCK & DAM	xxx											
UPBOUND STATISTICS	605	129	18	752	2785	3283	6068	618	50	10	678	5158
DNBOUND STATISTICS	605	141	19	765	1396	4951	6347	610	57	6	673	7143
TOTAL	1210	270	37	1517	4181	8234	12415	1228	107	16	1351	12301
CANNELTON LOCK & DAM AUX	xxx	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	13	157	6	176	35	3	38	18	76	0	94	5
DNBOUND STATISTICS	16	175	13	204	18	33	51	28	88	0	116	42
TOTAL	29	332	19	380	53	36	89	46	164	0	210	48
NEWBURGH LOCK & DAM	xxx											
UPBOUND STATISTICS	652	20	31	703	3297	3489	6786	654	8	1	663	5416
DNBOUND STATISTICS	662	88	20	770	1222	5823	7045	668	7	0	675	8059
TOTAL	1314	108	51	1473	4519	9312	13831	1322	15	1	1338	13476
NEWBURGH LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	72	1158	28	1258	114	71	185	112	587	9	708	112
DNBOUND STATISTICS	77	1168	32	1277	166	53	219	117	606	9	732	68
TOTAL	149	2326	60	2535	280	124	404	229	1193	18	1440	181
UNIONTOWN LOCK & DAM	xxx											
UPBOUND STATISTICS	674	17	17	708	4650	2897	7547	678	8	0	686	4638
DNBOUND STATISTICS	680	15	10	705	1028	6670	7698	687	10	2	699	9869
TOTAL	1354	32	27	1413	5678	9567	15245	1365	18	2	1385	14507
UNIONTOWN LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	50	862	18	930	81	42	123	68	544	5	617	83
DNBOUND STATISTICS	48	950	22	1020	89	25	114	68	630	6	704	36
TOTAL	98	1812	40	1950	170	67	237	136	1174	11	1321	120
SMITHLAND LOCK & DAM	xxx											
UPBOUND STATISTICS	134	111	8	253	842	309	1151	141	62	10	213	481
DNBOUND STATISTICS	690	170	28	888	898	6502	7400	709	107	11	827	9816
TOTAL	824	281	36	1141	1740	6811	8551	850	169	21	1040	10298

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H2	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED									
			7/85		8/85		9/85					

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
												(NAV, OPN, ETC)

## OHIO RIVER

SMITHLAND LOCK &amp; DAM AUX 1

\*\*\* ONLY FIRST AND SECOND MONTHS REPORTED

UPBOUND STATISTICS	721	128	30	879	5103	2611	7714	732	67	9	808	4200
DNBOUND STATISTICS	157	128	14	299	220	1247	1467	171	61	7	239	1922
TOTAL	878	256	44	1178	5323	3858	9181	903	128	16	1047	6122

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC W2	DISTRICT NAME			DIVISION NAME									MONTHS REPORTED					
	LOUISVILLE			OHIO RIVER									7/85		8/85		9/85	
													ALL TIMES EXPRESSED IN MINUTES					
APPROACH			LOCK PROCESSING TIME (MIN.)									:	DELAYED	DELAY	DELAY	DELAY		
			ENTRY	CHAMBER			EXIT			:	TOWS	TIME	AVG	MAX				
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:		TOWS	TOWS	(ALL VSLs)		
GREEN/BARREN RIVER																		
LOCK & DAM 1	1	5	25	1	3	12	5	8	29	1	4	19	149	3112	3.8	135		
LOCK & DAM 2	1	5	45	1	3	13	5	13	45	1	4	13	67	1397	2.4	55		
OHIO RIVER																		
MARKLAND LOCKS & DAM	1	20	60	1	10	29	5	13	30	1	9	27	191	39414	112.6	2192		
MARKLAND LOCKS & DAM AUX 1	1	9	100	1	8	37	2	12	53	1	14	91	582	206256	295.9	1364		
MCALPINE LOCKS & DAM	1	15	60	1	8	30	2	12	35	1	6	34	684	70902	66.6	1315		
MCALPINE LOCKS & DAM AUX 1	1	11	69	1	11	33	5	23	50	1	11	52	131	66207	494.0	1375		
LOCK & DAM 52	1	12	102	1	14	30	1	19	115	1	16	56	1141	311510	204.8	1510		
LOCK & DAM 52 AUX 1	1	10	85	1	8	50	5	12	42	1	10	81	289	25244	33.3	1292		
CANNELTON LOCK & DAM	1	20	65	1	7	30	5	11	30	1	8	30	717	60805	50.2	580		
CANNELTON LOCK & DAM AUX	1	9	45	1	2	15	5	10	20	1	3	10	0	0	0.0	47		
NEWBURGH LOCK & DAM	1	16	60	2	10	30	7	9	26	1	11	47	645	33072	25.1	265		
NEWBURGH LOCK & DAM AUX 1	1	4	33	1	2	28	5	8	22	1	3	28	21	294	1.9	127		
UNIONTOWN LOCK & DAM	1	19	60	1	8	30	5	10	30	1	8	27	706	39571	29.2	252		

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/85 THROUGH 9/85  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME			DIVISION NAME								MONTHS REPORTED						
H2	LOUISVILLE			OHIO RIVER								7/85		8/85		9/85		
<hr/>																		
													ALL TIMES EXPRESSED IN MINUTES					
APPROACH			LOCK PROCESSING TIME (MIN.)										:	DELAYED	DELAY	DELAY	DELAY	
			ENTRY		CHAMBER				EXIT		:	TOWS	:	TOWS	TIME	AVG	MAX	
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	TOWS	TOWS	(ALL VSLS)
<hr/>																		
OHIO RIVER																		
UNIONTOWN LOCK & DAM AUX 1			1	3	55	1	1	31	5	9	16	1	1	35	7	308	3.1	125
SMITHLAND LOCK & DAM			1	14	60	1	8	30	5	10	35	1	8	60	128	4662	5.6	228
SMITHLAND LOCK & DAM AUX 1			1	11	50	1	9	30	5	10	20	1	8	20	104	2581	2.9	305

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H3	NASHVILLE	OHIO RIVER	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CLINCH RIVER	11-MELTON HILL LOCK	0400/0075/11.0
CUMBERLAND RIVER	21-BARKLEY LOCK	0800/0110/11.0
	22-CHEATHAM LOCK	0800/0110/11.0
	23-CORDELL HULL LOCK	0400/0084/11.0
	24-OLD HICKORY LOCK	0400/0084/11.0
TENNESSEE RIVER	01-KENTUCKY LOCK	0600/0110/11.0
	02-PICKWICK LANDING LOCK	1000/0110/11.0
	02-PICKWICK LANDING LOCK AUX	0600/0110/11.0
	03-WILSON LOCK	0600/0110/11.0
	03-WILSON LOCK AUX	0292/0060/11.0
	04-GEN JOS WHEELER LOCK	0600/0110/11.0
	04-GEN JOS WHEELER LK      AUX1	0400/0060/11.0
	05-GUNTERSVILLE LOCK	0600/0110/11.0
	05-GUNTERSVILLE LOCK      AUX 1	0360/0060/11.0
	06-NICKAJAC LOCK	0600/0119/11.0
	07-CHICKAMAUGA LOCK	0360/0060/11.0
	08-WATTS BAR LOCK	0360/0060/11.0
	09-FORT LOUDON LOCK	0360/0060/11.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE		DIVISION NAME OHIO RIVER				MONTHS REPORTED							
			7/85			8/85			9/85					
RIVER/LOCK NAME			TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)														
CLINCH RIVER														
MELTON HILL LOCK			xxx											
UPBOUND STATISTICS			0	20	0	20	0	0	0	1	16	6	23	0
DNBOUND STATISTICS			0	39	0	39	0	0	0	0	21	7	28	0
TOTAL			0	59	0	59	0	0	0	1	37	13	51	0
CUMBERLAND RIVER														
BARKLEY LOCK			xxx											
UPBOUND STATISTICS			72	322	1	395	42	427	469	71	165	18	254	644
DNBOUND STATISTICS			110	336	6	452	906	40	946	127	191	17	335	64
TOTAL			182	658	7	847	948	467	1415	198	356	35	589	709
CHEATHAM LOCK			xxx											
UPBOUND STATISTICS			136	232	9	377	43	701	744	147	154	10	311	1095
DNBOUND STATISTICS			138	218	5	361	666	46	712	146	149	11	306	74
TOTAL			274	450	14	738	709	747	1456	293	303	21	617	1169
CORDELL HULL LOCK			xxx											
UPBOUND STATISTICS			5	25	7	37	24	0	24	15	24	4	43	0
DNBOUND STATISTICS			11	26	0	37	0	23	23	11	24	4	39	34
TOTAL			16	51	7	74	24	23	47	26	48	8	82	34
OLD HICKORY LOCK			xxx											
UPBOUND STATISTICS			37	773	11	821	11	60	71	49	372	4	425	96
DNBOUND STATISTICS			36	777	11	824	59	6	65	49	389	5	443	6
TOTAL			73	1550	22	1645	70	66	136	98	761	9	868	103
TENNESSEE RIVER														
KENTUCKY LOCK			xxx											
UPBOUND STATISTICS			436	201	59	696	779	3245	4024	670	156	8	834	4853
DNBOUND STATISTICS			409	105	54	568	2499	1158	3657	639	94	16	749	1665
TOTAL			845	306	113	1264	3278	4403	7681	1309	250	24	1583	6519



TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED										
			7/85		8/85		9/85						
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)													
TENNESSEE RIVER													
PICKWICK LANDING LOCK		***											
UPBOUND STATISTICS		288	296	14	598	95	2747	2842	343	180	8	531	3949
DNBOUND STATISTICS		311	258	16	585	2610	409	3019	394	165	9	568	605
TOTAL		599	554	30	1183	2705	3156	5861	737	345	17	1099	4554
PICKWICK LANDING LOCK AUX		***	NO DATA RECORDED FOR THIS LOCK										
WILSON LOCK		***											
UPBOUND STATISTICS		159	346	54	559	173	1083	1256	228	235	4	467	1618
DNBOUND STATISTICS		164	337	49	550	938	375	1313	241	245	4	490	528
TOTAL		323	683	103	1109	1111	1458	2569	469	480	8	957	2147
WILSON LOCK AUX		***	NO DATA RECORDED FOR THIS LOCK										
GEN JOS WHEELER LOCK		***											
UPBOUND STATISTICS		144	115	2	261	154	1043	1197	201	74	1	276	1532
DNBOUND STATISTICS		144	59	4	207	907	352	1259	208	56	5	269	488
TOTAL		288	174	6	468	1061	1395	2456	409	130	6	545	2020
GEN JOS WHEELER LK		AUX1	***										
UPBOUND STATISTICS		2	351	1	354	2	0	2	4	209	1	214	0
DNBOUND STATISTICS		1	393	2	396	1	0	1	4	234	4	242	0
TOTAL		3	744	3	750	3	0	3	8	443	5	456	0
GUNTERSVILLE LOCK		***											
UPBOUND STATISTICS		157	1084	2	1243	273	801	1074	173	474	3	650	1233
DNBOUND STATISTICS		156	1075	3	1234	728	437	1165	175	496	4	675	586
TOTAL		313	2159	5	2477	1001	1238	2239	348	970	7	1325	1819
GUNTERSVILLE LOCK		AUX 1	***	NO DATA RECORDED FOR THIS LOCK									
NICKAJAC LOCK		***											
UPBOUND STATISTICS		167	218	8	393	326	749	1075	195	150	3	348	1017
DNBOUND STATISTICS		164	202	9	375	696	421	1117	197	153	7	357	588
TOTAL		331	420	17	768	1022	1170	2192	392	303	10	705	1606
CHICKAMAUGA LOCK		***											
UPBOUND STATISTICS		66	573	5	644	86	214	300	110	578	6	694	321
DNBOUND STATISTICS		64	570	7	641	200	106	304	100	581	9	699	141
TOTAL		130	1143	12	1285	286	320	606	219	1159	15	1393	463

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER						MONTHS REPORTED				
								7/85	8/85	9/85		
-----												
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
-----												
TENNESSEE RIVER												
WATTS BAR LOCK	XXX											
UPBOUND STATISTICS	44	512	0	556	65	67	132	55	403	28	486	128
DNBOUND STATISTICS	43	500	3	546	45	98	143	61	411	32	504	132
TOTAL	87	1012	3	1102	110	165	275	116	814	60	990	261
FORT LOUDON LOCK	XXX											
UPBOUND STATISTICS	28	310	3	341	8	51	59	35	219	8	262	102
DNBOUND STATISTICS	32	312	2	346	50	18	68	41	236	5	282	23
TOTAL	60	622	5	687	58	69	127	76	455	13	544	125

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED																	
			7/85												8/85				9/85	
			-----																	
															ALL TIMES EXPRESSED IN MINUTES					
APPROACH			LOCK PROCESSING TIME (MIN.)						: DELAYED							DELAY	DELAY	DELAY		
			ENTRY			CHAMBER			EXIT			: TOWS				TIME	AVG	MAX		
MIN AVG MAX			: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)	
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLS)		
MIN			AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS				

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED													
H3	NASHVILLE	OHIO RIVER	7/85						8/85				9/85			
-----																
												ALL TIMES EXPRESSED IN MINUTES				
												:	DELAYED	DELAY	DELAY	DELAY
												:	TOWS	TIME	AVG	MAX
APPROACH			LOCK PROCESSING TIME (MIN.)									:				
			ENTRY		CHAMBER		EXIT				:					
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:					
												:	TOWS	TOWS	(ALL VSLS)	

## TENNESSEE RIVER

GUNTERSVILLE LOCK	AUX	NO DATA RECORDED FOR THIS LOCK														
NICKAJAC LOCK	1	8	57	1	9	41	9	14	33	1	9	46	63	3079	9.3	134
CHICKAMAUGA LOCK	1	3	219	1	3	19	6	11	25	1	4	66	42	5082	39.0	575
WATTS BAR LOCK	1	5	135	1	3	29	6	15	298	1	3	123	28	2127	24.4	309
FORT LOUDON LOCK	1	9	55	1	3	21	6	21	143	1	3	26	13	695	11.5	270

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED 7/85 8/85 9/85
RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)	
ALLEGHENY RIVER	42-LOCK & DAM 2	0360/0056/13.0	
	43-LOCK & DAM 3	0360/0056/13.0	
	44-LOCK & DAM 4	0360/0056/13.0	
	45-LOCK & DAM 5	0360/0056/13.0	
	46-LOCK & DAM 6	0360/0056/13.0	
	47-LOCK & DAM 7	0360/0056/13.0	
	48-LOCK & DAM 8	0360/0056/13.0	
	49-LOCK & DAM 9	0360/0056/13.0	
MONONGAHELA RIVER	22-LOCK & DAM 2	0720/0110/13.0	
	22-LOCK & DAM 2 AUX 1	0360/0056/13.0	
	23-LOCK & DAM 3	0720/0056/13.0	
	23-LOCK & DAM 3 AUXILIARY 1	0360/0056/13.0	
	24-LOCK & DAM 4	0720/0056/13.0	
	24-LOCK & DAM 4 AUXILIARY 1	0360/0056/13.0	
	25-MAXWELL LOCK & DAM	0720/0084/13.0	
	25-MAXWELL LOCK & DAM AUX 1	0720/0084/13.0	
	27-LOCK & DAM 7	0360/0056/13.0	
	28-LOCK & DAM 8	0360/0056/13.0	
	29-MORGANTOWN LOCK & DAM	0600/0084/13.0	
	30-HILDEBRAND LOCK & DAM	0600/0084/13.0	
	31-OPEKISKA LOCK & DAM	0600/0084/13.0	
OHIO RIVER	01-EMSWORTH LOCK & DAM	0600/0110/13.0	
	01-EMSWORTH LOCK & DAM AUX 1	0360/0056/13.0	
	02-DASHIELDS LOCK & DAM	0600/0110/13.0	
	02-DASHIELDS LOCK & DAM AUX 1	0360/0056/13.0	
	03-MONTGOMERY LOCK & DAM	0600/0110/13.0	
	03-MONTGOMERY LOCK & DAM AUX 1	0360/0056/13.0	
	04-NEW CUMBERLAND LOCK & DAM	1200/0110/13.0	
	04-NEW CUMBERLAND LK & DAM AUX 1	0600/0110/13.0	
	05-PIKE ISLAND LOCK & DAM	1200/0110/13.0	
	05-PIKE ISLAND LOCK & DAM AUX 1	0600/0110/13.0	
	71-HANNIBAL LOCKS & DAM	1200/0110/13.0	
	71-HANNIBAL LOCKS & DAM AUX 1	0600/0110/13.0	

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER					MONTHS REPORTED						9/85
		7/85			8/85								
-----													
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)	
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL		
(NAV, OPN, ETC)													
-----													
ALLEGHENY RIVER													
LOCK & DAM 2	XXX												
UPBOUND STATISTICS	280	2925	22	3227	544	368	912	343	1138	10	1491	407	
DNBOUND STATISTICS	279	3033	119	3431	381	539	920	342	1137	7	1486	291	
TOTAL	559	5958	141	6658	925	907	1832	685	2275	17	2977	699	
LOCK & DAM 3	XXX												
UPBOUND STATISTICS	275	1428	23	1726	541	363	904	348	705	7	1060	408	
DNBOUND STATISTICS	281	1413	20	1714	394	540	934	356	682	5	1043	291	
TOTAL	556	2841	43	3440	935	903	1838	704	1387	12	2103	700	
LOCK & DAM 4	XXX												
UPBOUND STATISTICS	266	1663	117	2046	902	84	986	315	783	6	1104	118	
DNBOUND STATISTICS	280	1561	15	1856	106	909	1015	329	721	6	1056	443	
TOTAL	546	3224	132	3902	1008	993	2001	644	1504	12	2160	561	
LOCK & DAM 5	XXX												
UPBOUND STATISTICS	207	963	1	1171	873	3	876	219	562	6	787	1	
DNBOUND STATISTICS	206	980	5	1191	12	860	872	223	532	7	762	379	
TOTAL	413	1943	6	2362	885	863	1748	442	1094	13	1549	380	
LOCK & DAM 6	XXX												
UPBOUND STATISTICS	202	464	2	668	781	3	784	216	344	3	563	1	
DNBOUND STATISTICS	206	464	1	671	22	779	801	222	334	5	561	338	
TOTAL	408	928	3	1339	803	782	1585	438	678	8	1124	339	
LOCK & DAM 7	XXX												
UPBOUND STATISTICS	24	455	4	483	65	0	65	29	269	3	301	0	
DNBOUND STATISTICS	23	461	6	490	1	61	62	30	283	3	316	34	
TOTAL	47	916	10	973	66	61	127	59	552	6	617	34	
LOCK & DAM 8	XXX												
UPBOUND STATISTICS	178	425	5	608	178	0	176	184	252	2	438	0	
DNBOUND STATISTICS	179	429	3	611	1	178	179	182	263	2	447	282	
TOTAL	357	854	8	1219	179	178	357	366	515	4	885	282	
LOCK & DAM 9	XXX												
UPBOUND STATISTICS	0	394	0	394	0	0	0	1	213	0	214	0	
DNBOUND STATISTICS	0	385	0	385	0	0	0	1	216	0	217	0	
TOTAL	0	779	0	779	0	0	0	2	429	0	431	0	

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED									
			7/85		8/85		9/85					
RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)												
MONONGAHELA RIVER												
LOCK & DAM 2	xxx											
UPBOUND STATISTICS	447	1	5	453	2069	1003	3072	486	1	3	490	1257
DNBOUND STATISTICS	451	4	3	458	658	2513	3171	494	1	3	498	2628
TOTAL	898	5	8	911	2727	3516	6243	980	2	6	988	3885
LOCK & DAM 2 AUX 1	xxx											
UPBOUND STATISTICS	166	585	105	856	107	171	278	246	329	4	579	125
DNBOUND STATISTICS	141	601	96	838	173	58	231	239	324	6	569	60
TOTAL	307	1186	201	1694	280	229	509	485	653	10	1148	185
LOCK & DAM 3	xxx											
UPBOUND STATISTICS	705	9	19	733	3195	439	3634	713	3	0	716	526
DNBOUND STATISTICS	711	15	8	734	238	3359	3597	711	9	1	721	3412
TOTAL	1416	24	27	1467	3433	3798	7231	1424	12	1	1437	3938
LOCK & DAM 3 AUXILIARY 1	xxx											
UPBOUND STATISTICS	238	488	168	894	673	142	815	392	281	2	675	154
DNBOUND STATISTICS	243	486	164	893	124	687	811	392	277	5	674	706
TOTAL	481	974	332	1787	797	829	1626	784	558	7	1349	860
LOCK & DAM 4	xxx											
UPBOUND STATISTICS	499	89	7	595	2683	293	2976	555	46	2	603	317
DNBOUND STATISTICS	516	85	7	608	128	2866	2994	584	49	2	635	3021
TOTAL	1015	174	14	1203	2811	3159	5970	1139	95	4	1238	3339
LOCK & DAM 4 AUXILIARY 1	xxx											
UPBOUND STATISTICS	190	274	30	494	786	140	926	321	252	3	576	132
DNBOUND STATISTICS	174	281	37	492	98	804	902	316	270	4	590	791
TOTAL	364	555	67	986	884	944	1828	637	522	7	1166	924
MAXWELL LOCK & DAM	xxx											
UPBOUND STATISTICS	500	415	9	924	2683	267	2950	506	224	4	734	283
DNBOUND STATISTICS	142	409	6	557	46	702	748	148	214	3	365	721
TOTAL	642	824	15	1481	2729	969	3698	654	438	7	1099	1005
MAXWELL LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	130	360	4	494	675	77	752	132	165	4	301	84
DNBOUND STATISTICS	491	347	4	842	58	2904	2962	493	170	3	666	2929
TOTAL	621	707	8	1336	733	2981	3714	625	335	7	967	3013

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED									
			7/85		8/85		9/85					
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
-----												
MONONGAHELA RIVER												
LOCK & DAM 7	xxx											
UPBOUND STATISTICS	600	90	44	734	2568	302	2870	1101	104	6	1211	347
DNBOUND STATISTICS	599	89	41	729	101	2771	2872	1111	108	7	1226	2725
TOTAL	1199	179	85	1463	2669	3073	5742	2212	212	13	2437	3073
LOCK & DAM 8	xxx											
UPBOUND STATISTICS	534	74	34	642	2134	305	2439	962	98	6	1066	358
DNBOUND STATISTICS	531	84	37	652	110	2350	2460	962	103	5	1070	2314
TOTAL	1065	158	71	1294	2244	2655	4899	1924	201	11	2136	2672
MORGANTOWN LOCK & DAM	xxx											
UPBOUND STATISTICS	122	134	24	280	516	8	524	146	100	1	247	9
DNBOUND STATISTICS	123	141	24	288	15	511	526	146	95	1	242	531
TOTAL	245	275	48	568	531	519	1050	292	195	2	489	540
HILDEBRAND LOCK & DAM	xxx											
UPBOUND STATISTICS	79	77	15	171	313	3	316	93	60	2	155	3
DNBOUND STATISTICS	79	75	12	166	7	307	314	91	58	2	151	333
TOTAL	158	152	27	337	320	310	630	184	118	4	306	337
OPEKISKA LOCK & DAM	xxx											
UPBOUND STATISTICS	40	136	12	188	100	4	104	52	99	6	157	4
DNBOUND STATISTICS	39	145	11	195	3	96	99	51	96	5	152	99
TOTAL	79	281	23	383	103	100	203	103	195	11	309	104
OHIO RIVER												
EMSWORTH LOCK & DAM	xxx											
UPBOUND STATISTICS	525	27	13	565	1485	1930	3415	609	11	3	623	2196
DNBOUND STATISTICS	532	50	12	594	1456	2051	3507	623	13	4	640	2257
TOTAL	1057	77	25	1159	2941	3981	6922	1232	24	7	1263	4454
EMSWORTH LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	160	974	103	1237	104	109	213	330	464	24	818	111
DNBOUND STATISTICS	155	956	110	1221	169	49	218	324	522	22	868	48
TOTAL	315	1930	213	2458	273	158	431	654	986	46	1686	160



TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER						MONTHS REPORTED					
		7/85			8/85		9/85						
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER (NAV, OPN, ETC)	LCKGES TOTAL	TONNAGE (KTONS)
OHIO RIVER													
DASHIELDS LOCK & DAM		xxx											
UPBOUND STATISTICS		471	0	11	482	1416	2224	3640	554	0	0	554	2495
DNBOUND STATISTICS		498	3	5	506	1714	2062	3776	588	1	1	590	2266
TOTAL		969	3	16	988	3130	4286	7416	1142	1	1	1144	4762
DASHIELDS LOCK & DAM AUX 1		xxx											
UPBOUND STATISTICS		137	671	100	908	117	64	181	249	404	9	662	70
DNBOUND STATISTICS		113	653	115	881	78	62	140	238	415	12	665	62
TOTAL		250	1324	215	1789	195	126	321	487	819	21	1327	132
MONTGOMERY LOCK & DAM		xxx											
UPBOUND STATISTICS		466	22	8	496	1446	2312	3758	580	4	0	584	2795
DNBOUND STATISTICS		494	4	5	503	1874	2067	3941	613	2	1	616	2348
TOTAL		960	26	13	999	3320	4379	7699	1193	6	1	1200	5143
MONTGOMERY LOCK & DAM AUX 1		xxx											
UPBOUND STATISTICS		84	721	80	885	70	46	116	175	381	7	563	44
DNBOUND STATISTICS		77	750	84	911	61	34	95	169	402	8	579	39
TOTAL		161	1471	164	1796	131	80	211	344	783	15	1142	83
NEW CUMBERLAND LOCK & DAM		xxx											
UPBOUND STATISTICS		307	30	15	352	277	2859	3136	314	15	0	329	3854
DNBOUND STATISTICS		307	45	7	359	2139	1076	3215	314	17	0	331	1366
TOTAL		614	75	22	711	2416	3935	6351	628	32	0	660	5221
NEW CUMBERLAND LK & DAM AUX 1		xxx											
UPBOUND STATISTICS		140	629	79	848	137	287	424	216	346	6	568	345
DNBOUND STATISTICS		147	672	83	902	356	128	484	227	360	6	593	141
TOTAL		287	1301	162	1750	493	415	908	443	706	12	1161	486
PIKE ISLAND LOCK & DAM		xxx											
UPBOUND STATISTICS		335	33	6	374	287	3086	3373	340	17	1	358	4388
DNBOUND STATISTICS		318	30	5	353	2098	1328	3426	321	12	1	334	1741
TOTAL		653	63	11	727	2385	4414	6799	661	29	2	692	6129
PIKE ISLAND LOCK & DAM AUX 1		xxx											
UPBOUND STATISTICS		96	340	33	469	150	120	270	147	205	6	358	174
DNBOUND STATISTICS		118	354	29	501	229	103	352	167	217	8	392	131
TOTAL		214	694	62	970	379	223	622	314	422	14	750	305

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME	DIVISION NAME					MONTHS REPORTED					
	PITTSBURGH	OHIO RIVER					7/85		8/85		9/85	
-----												
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
-----												
OHIO RIVER												
HANNIBAL LOCKS & DAM	***											
UPBOUND STATISTICS	350	37	2	389	914	2764	3678	355	27	3	385	3929
DNBOUND STATISTICS	326	23	5	354	1623	2152	3775	332	22	0	354	2940
TOTAL	676	60	7	743	2537	4916	7453	687	49	3	739	6869
HANNIBAL LOCKS & DAM AUX 1	***											
UPBOUND STATISTICS	37	232	11	280	67	43	110	50	159	4	213	50
DNBOUND STATISTICS	54	259	13	326	93	55	148	68	186	5	259	43
TOTAL	91	491	24	606	160	98	258	118	345	9	472	94

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH			DIVISION NAME OHIO RIVER								MONTHS REPORTED 7/85                      8/85                      9/85				
ALL TIMES EXPRESSED IN MINUTES																
APPROACH			LOCK PROCESSING TIME (MIN.)								: DELAYED	DELAY	DELAY	DELAY		
			ENTRY	CHAMBER				EXIT	: TOWS	TIME					AVG	MAX
MIN    AVG    MAX			: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TOWS	TOWS	(ALL VSLs)
ALLEGHENY RIVER																
LOCK & DAM 2	1	3	32	1	4	30	5	7	24	1	4	26	256	8084	14.4	400
LOCK & DAM 3	1	4	60	1	4	23	5	8	15	1	4	30	190	7987	14.3	245
LOCK & DAM 4	1	3	25	1	3	21	5	7	30	1	4	25	180	5274	9.6	600
LOCK & DAM 5	1	3	20	1	2	11	6	8	19	1	3	20	95	658	1.5	28
LOCK & DAM 6	2	3	12	2	3	8	5	7	9	2	4	10	80	1158	2.8	124
LOCK & DAM 7	1	2	12	1	2	5	7	8	10	2	2	10	8	120	2.5	48
LOCK & DAM 8	1	4	16	1	3	13	5	8	13	1	3	6	15	135	0.3	33
LOCK & DAM 9	1	1	11	1	1	10	6	9	10	1	1	5	0	0	0.0	12
MONONGAHELA RIVER																
LOCK & DAM 2	1	12	54	2	6	23	5	11	45	1	7	43	296	13839	15.4	308
LOCK & DAM 2 AUX 1	1	6	40	1	2	21	5	6	19	1	2	14	45	499	1.6	40
LOCK & DAM 3	1	11	48	1	6	22	5	9	30	1	7	59	735	32255	22.7	254
LOCK & DAM 3 AUXILIARY 1	1	7	60	1	3	24	5	8	19	1	3	16	219	9599	19.9	233
LOCK & DAM 4	1	11	66	1	7	23	5	10	42	1	8	59	554	37840	37.2	775

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH			DIVISION NAME OHIO RIVER									MONTHS REPORTED				
													7/85			8/85	
	ALL TIMES EXPRESSED IN MINUTES																
	APPROACH			LOCK PROCESSING TIME (MIN.)									: DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)	
MIN				AVG	MAX	: MIN	ENTRY		CHAMBER		EXIT						: MIN
	MIN	AVG	MAX				MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	:	
MONONGAHELA RIVER																	
LOCK & DAM 4 AUXILIARY 1	1	6	94	1	4	21	5	9	19	1	6	64	241	96212	264.3	1304	
MAXWELL LOCK & DAM	1	7	28	1	5	20	5	10	40	1	6	26	78	1197	1.8	600	
MAXWELL LOCK & DAM AUX 1	1	9	60	1	6	22	5	11	43	1	7	27	89	1343	2.1	545	
LOCK & DAM 7	1	5	60	1	5	20	5	5	28	1	9	40	664	38479	32.0	306	
LOCK & DAM 8	1	5	36	1	4	20	5	6	16	1	9	44	483	25456	23.9	429	
MORGANTOWN LOCK & DAM	2	5	15	2	4	15	5	10	15	2	4	15	9	129	0.5	45	
HILDEBRAND LOCK & DAM	1	6	21	1	4	22	10	17	60	1	4	20	11	317	2.0	69	
OPEKISKA LOCK & DAM	1	4	16	1	2	10	10	10	20	2	3	13	2	19	0.2	20	
OHIO RIVER																	
EMSWORTH LOCK & DAM	1	13	69	2	7	29	7	13	40	2	9	55	438	23658	22.3	310	
EMSWORTH LOCK & DAM AUX 1	1	5	35	1	3	24	5	8	37	1	3	15	77	1168	3.7	52	
DASHIELDS LOCK & DAM	1	14	53	1	9	34	6	11	37	1	12	42	450	29349	30.2	557	
DASHIELDS LOCK & DAM AUX 1	1	6	51	1	2	20	5	6	31	1	2	36	50	755	3.0	728	
MONTGOMERY LOCK & DAM	1	11	60	2	10	56	5	13	40	2	13	52	530	35408	36.8	410	

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME				DIVISION NAME								MONTHS REPORTED					
	PITTSBURGH				OHIO RIVER								7/85		8/85		9/85	
														ALL TIMES EXPRESSED IN MINUTES				
				LOCK PROCESSING TIME (MIN.)								:	DELAYED	DELAY	DELAY	DELAY		
APPROACH				ENTRY		CHAMBER				EXIT		:	TOWS	TIME	AUG	MAX		
MIN		AVG		MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX		
														:	TOWS	TOWS	TOWS	(ALL USLS)
OHIO RIVER																		
MONTGOMERY LOCK & DAM AUX 1																		
1	1	4	55	1	3	16	5	9	38	1	3	14	33	650	4.0	65		
NEW CUMBERLAND LOCK & DAM																		
	1	20	57	1	7	28	9	15	29	1	12	45	156	6527	10.6	145		
NEW CUMBERLAND LK & DAM AUX																		
	1	8	44	1	2	16	5	12	37	1	6	32	53	1070	3.7	70		
PIKE ISLAND LOCK & DAM																		
	1	15	58	1	11	31	6	15	40	2	11	31	181	8273	12.6	233		
PIKE ISLAND LOCK & DAM AUX 1																		
1	1	8	59	1	4	32	5	14	25	1	6	26	33	658	3.0	52		
HANNIBAL LOCKS & DAM																		
	1	15	59	1	9	24	5	15	44	1	10	30	194	7272	10.7	170		
HANNIBAL LOCKS & DAM AUX 1																		
1	1	9	45	1	3	14	5	15	48	1	7	22	11	170	1.8	62		

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/85 THROUGH 9/85  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K3	JACKSONVILLE	SOUTH ATLANTIC	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CROSS FLA BRG CNL	11-HENRY HOLLAND BUCKMAN LOCK	0600/0084/15.0
	12-EUREKA LOCK	0600/0084/15.0
	13-INGLIS LOCK	0600/0084/15.0
CANAVERAL HARBOR	21-CANAVERAL LOCK	0600/0090/15.0
OKEECHOBEE WATERWAY	01-ST LUCIE LOCK & DAM	0250/0050/14.0
	02-MOORE HAVEN LOCK	0250/0050/11.0
	03-ORTONA LOCK & DAM	0250/0050/12.0
	04-W P FRANKLIN LCK & CTRL STRCT	0400/0056/14.0
	05-PORT MAYACA LOCK	0400/0056/14.0
OKLAHAMA RIVER	31-MOSS BLUFF LOCK & DAM	0156/0030/55.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
K5	MOBILE	SOUTH ATLANTIC	7/85 8/85 9/85

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RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ALABAMA-COOSA RIVERS	11-CLAIBORNE LOCK & DAM	0600/0084/12.0
	12-MILLERS FERRY LOCK & DAM	0600/0084/12.0
	13-JONES BLUFF LOCK & DAM	0600/0084/12.0
APLCH/CHTCH/FLNT RI	21-JIM WOODRUFF LOCK & DAM	0450/0082/12.0
	22-GEORGE W ANDREWS LOCK & DAM	0450/0082/12.0
	23-WALTER F GEORGE LOCK & DAM	0450/0082/12.0
BLKWAR/TOMBIGBEE RI	01-COFFEEVILLE LOCK	0600/0110/12.0
	02-DEMOPOLIS LOCK & DAM	0600/0110/12.0
	03-WARRIOR LOCK & DAM	0600/0110/12.0
	04-WILLIAM BACON OLIVER LK & DM	0460/0095/12.0
	05-HOLT LOCK & DAM	0600/0110/12.0
	06-JOHN HOLLIS BANKHEAD LK & DM	0600/0110/12.0
PEARL RIVER	31-LOCK 1	0310/0065/ 9.0
	32-LOCK 2	0310/0065/ 9.0
	33-LOCK 3	0310/0065/ 9.0
TENN TOMBIGBEE WATERWAY	41-GAINESVILLE LOCK & DAM	0600/0110/12.0
	42-ALICEVILLE LOCK & DAM	0600/0110/12.0
	43-COLUMBUS LOCK & DAM	0600/0110/12.0
	44-ABERDEEN LOCK & DAM	0600/0110/12.0
	45-LOCK A	0600/0110/12.0
	46-LOCK B	0600/0110/12.0
	47-LOCK C	0600/0110/12.0
	48-LOCK D	0600/0110/12.0
	49-LOCK E	0600/0110/12.0
	50-BAY SPRINGS	0600/0110/12.0

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NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K6	SAVANNAH	SOUTH ATLANTIC	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
SAVANNAH RIVER	01-NEW SAVANNAH BLUFF LOCK & DAM	0360/0056/12.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD



TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K7	WILMINGTON	SOUTH ATLANTIC	7/85	8/85	9/85

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RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CAPE FEAR RIVER	01-LOCK & DAM 1	0200/0040/10.0
	02-LOCK & DAM 2	0200/0040/10.0
	03-WILLIAM O HUSKE LOCK & DAM	0300/0040/10.0

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TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC K7	DISTRICT NAME WILMINGTON	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED									
			7/85			8/85			9/85			
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
-----												
CAPE FEAR RIVER												
LOCK & DAM 1	XXX											
UPBOUND STATISTICS	9	7	0	16	1	8	9	17	4	4	25	8
DNBOUND STATISTICS	9	16	0	25	9	0	9	14	7	7	28	0
TOTAL	18	23	0	41	10	8	18	31	11	11	53	8
LOCK & DAM 2	XXX											
UPBOUND STATISTICS	9	1	3	13	0	9	9	18	1	1	20	9
DNBOUND STATISTICS	9	5	8	22	9	0	9	16	5	1	22	0
TOTAL	18	6	11	35	9	9	18	34	6	2	42	9
WILLIAM O HUSKE LOCK & DAM	XXX											
UPBOUND STATISTICS	9	6	0	15	0	9	9	9	3	3	15	10
DNBOUND STATISTICS	9	7	0	16	9	0	9	9	3	3	15	0
TOTAL	18	13	0	31	9	9	18	18	6	6	30	10

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC K7	DISTRICT NAME WILMINGTON			DIVISION NAME SOUTH ATLANTIC									MONTHS REPORTED			
													7/85			8/85
	ALL TIMES EXPRESSED IN MINUTES															
APPROACH			LOCK PROCESSING TIME (MIN.)									: DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)	
			ENTRY	CHAMBER		EXIT		: TOWS	TIME TOWS	AVG TOWS	MAX (ALL VSLS)					
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG					MAX	: MIN	AVG	MAX	:
CAPE FEAR RIVER																
LOCK & DAM 1	1	4	5	1	5	15	1	13	15	1	5	20	0	0	0.0	5
LOCK & DAM 2	5	5	5	5	5	10	5	11	20	5	6	15	18	89	4.9	10
WILLIAM O HUSKE LOCK & DAM	5	5	5	5	5	5	25	25	25	5	5	5	18	90	5.0	5

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
L2	SACRAMENTO	SOUTH PACIFIC	7/85 8/85 9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
SCRNTO DWSHP CHNL	01-BARGE CANAL LOCK	0640/0086/23.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M3	GALVESTON	SOUTHWESTERN	7/85	8/85	9/85

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RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
GULF INTRACOASTAL	11-COLORADO RIVER EAST LOCK	1200/0075/15.0
	12-COLORADO RIVER WEST LOCK	1200/0075/15.0
	13-BRAZOS EAST GATE	9999/0075/15.0
	14-BRAZOS WEST GATE	9999/0075/15.0

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TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC #3	DISTRICT NAME GALVESTON	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED									
			7/85		8/85		9/85					
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
-----												
GULF INTRACOASTAL												
COLORADO RIVER EAST LOCK	***											
UPBOUND STATISTICS	995	1841	263	3099	575	1615	2190	204	8	945	1157	3378
DNBOUND STATISTICS	1076	2095	172	3343	1478	706	2184	91	10	1072	1173	1245
TOTAL	2071	3936	435	6442	2053	2321	4374	295	18	2017	2330	4623
COLORADO RIVER WEST LOCK	***											
UPBOUND STATISTICS	916	1784	195	2895	463	1580	2043	26	22	1050	1098	3328
DNBOUND STATISTICS	994	1787	108	2889	1444	612	2056	24	19	1057	1100	1148
TOTAL	1910	3571	303	5784	1907	2192	4099	50	41	2107	2198	4477
BRAZOS EAST GATE	***											
UPBOUND STATISTICS	1088	524	261	1873	638	1651	2289	2	0	1122	1124	3219
DNBOUND STATISTICS	1168	515	266	1949	1476	776	2252	5	0	1203	1208	1307
TOTAL	2256	1039	527	3822	2114	2427	4541	7	0	2325	2332	4526
BRAZOS WEST GATE	***											
UPBOUND STATISTICS	1048	715	276	2039	616	1640	2256	5	0	1066	1071	3165
DNBOUND STATISTICS	1144	553	239	1936	1458	767	2225	3	0	1164	1167	1295
TOTAL	2192	1268	515	3975	2074	2407	4481	8	0	2230	2238	4460

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC M3	DISTRICT NAME GALVESTON			DIVISION NAME SOUTHWESTERN									MONTHS REPORTED						
													7/85			8/85		9/85	
</																			

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/85 THROUGH 9/85  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M4	LITTLE ROCK	SOUTHWESTERN	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ARKANSAS RIVER	01-NORRELL LOCK & DAM	0600/0110/12.0
	02-LOCK & DAM 2	0600/0110/12.0
	03-LOCK & DAM 3	0600/0110/12.0
	04-LOCK & DAM 4	0600/0110/12.0
	05-LOCK & DAM 5	0600/0110/12.0
	06-DAVID D TERRY LOCK & DAM	0600/0110/12.0
	07-MURRAY LOCK & DAM	0600/0110/12.0
	08-TOAD SUCK FERRY LOCK & DAM	0600/0110/12.0
	09-LOCK & DAM 9	0600/0110/12.0
	10-DARDANELLE LOCK & DAM	0600/0110/12.0
	11-OZARK LOCK & DAM	0600/0110/12.0
	13-LOCK & DAM 13	0600/0110/12.0



TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC #4	DISTRICT NAME LITTLE ROCK	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED										
			7/85		8/85		9/85						
RIVER/LOCK NAME		TOWS	VESSL RECTRN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)													
ARKANSAS RIVER													
MORRELL LOCK & DAM		xxx											
UPBOUND STATISTICS		160	88	60	308	373	411	784	206	57	30	293	587
DNBOUND STATISTICS		169	89	46	304	158	639	797	210	62	32	304	984
TOTAL		329	177	106	612	531	1050	1581	416	119	62	597	1571
LOCK & DAM 2		xxx											
UPBOUND STATISTICS		164	83	35	282	381	412	793	189	57	20	266	584
DNBOUND STATISTICS		169	86	20	275	158	645	803	188	64	22	274	997
TOTAL		333	169	55	557	539	1057	1596	377	121	42	540	1582
LOCK & DAM 3		xxx											
UPBOUND STATISTICS		141	367	5	513	321	404	725	145	230	68	443	581
DNBOUND STATISTICS		139	386	2	527	177	568	745	143	225	76	444	931
TOTAL		280	753	7	1040	498	972	1470	288	455	144	887	1512
LOCK & DAM 4		xxx											
UPBOUND STATISTICS		140	307	10	457	317	394	711	144	173	22	339	575
DNBOUND STATISTICS		140	339	5	484	192	561	753	145	164	29	338	874
TOTAL		280	646	15	941	509	955	1464	289	337	51	677	1449
LOCK & DAM 5		xxx											
UPBOUND STATISTICS		124	427	7	558	227	361	588	129	294	24	447	510
DNBOUND STATISTICS		129	437	2	568	181	466	647	134	323	23	480	795
TOTAL		253	864	9	1126	408	827	1235	263	617	47	927	1306
DAVID D TERRY LOCK & DAM		xxx											
UPBOUND STATISTICS		125	995	11	1131	227	355	582	130	564	21	715	507
DNBOUND STATISTICS		130	1018	6	1154	183	467	650	134	587	24	745	792
TOTAL		255	2013	17	2285	410	822	1232	264	1151	45	1460	1299
MURRAY LOCK & DAM		xxx											
UPBOUND STATISTICS		102	749	3	854	191	308	499	105	379	8	492	434
DNBOUND STATISTICS		100	761	15	876	127	397	524	108	414	10	532	709
TOTAL		202	1510	18	1730	318	705	1023	213	793	18	1024	1143
TOAD SUCK FERRY LOCK & DAM		xxx											
UPBOUND STATISTICS		102	121	3	226	187	312	499	102	105	14	221	440
DNBOUND STATISTICS		99	136	5	240	113	396	509	105	117	15	237	704
TOTAL		201	257	8	466	300	708	1008	207	222	29	458	1144

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC M4	DISTRICT NAME	DIVISION NAME						MONTHS REPORTED					
	LITTLE ROCK	SOUTHWESTERN						7/85		8/85		9/85	
-----													
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE	
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL		(KTONS)
-----													
-----													
ARKANSAS RIVER													
LOCK & DAM 9	XXX												
UPBOUND STATISTICS	100	102	3	205	185	310	495	103	78	127	308	543	
DNBOUND STATISTICS	103	112	5	220	128	395	523	112	91	122	325	693	
TOTAL	203	214	8	425	313	705	1018	215	169	249	633	1236	
DARDANELLE LOCK & DAM	XXX												
UPBOUND STATISTICS	98	152	17	267	187	283	470	106	122	26	254	399	
DNBOUND STATISTICS	100	193	7	300	115	398	513	111	147	31	289	716	
TOTAL	198	345	24	567	302	681	983	217	269	57	543	1116	
OZARK LOCK & DAM	XXX												
UPBOUND STATISTICS	97	144	1	242	187	291	478	100	92	10	202	409	
DNBOUND STATISTICS	96	162	2	260	108	403	511	103	108	13	224	723	
TOTAL	193	306	3	502	295	694	989	203	200	23	426	1132	
LOCK & DAM 13	XXX												
UPBOUND STATISTICS	254	199	26	479	189	569	758	277	128	12	417	554	
DNBOUND STATISTICS	257	219	22	498	393	403	796	282	151	14	447	715	
TOTAL	511	418	48	977	582	972	1554	559	279	26	864	1270	

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC M4	DISTRICT NAME LITTLE ROCK			DIVISION NAME SOUTHWESTERN			MONTHS REPORTED 7/85                      8/85                      9/85									
ALL TIMES EXPRESSED IN MINUTES																
APPROACH			LOCK PROCESSING TIME (MIN.)									: DELAYED	DELAY	DELAY	DELAY	
			ENTRY	CHAMBER			EXIT	: TOWS	TIME	AVG	MAX					
MIN	AVG	MAX		: MIN	AVG	MAX						: MIN	AVG	MAX	: MIN	AVG
-----																
ARKANSAS RIVER																
NORRELL LOCK & DAM	1	8	45	1	7	35	5	11	37	2	7	45	20	769	2.3	220
LOCK & DAM 2	1	9	75	1	9	128	5	11	45	1	9	55	57	1591	4.7	83
LOCK & DAM 3	1	5	75	1	5	30	5	9	31	1	5	47	35	770	2.7	1461
LOCK & DAM 4	1	7	55	1	5	45	5	9	57	1	6	75	30	590	2.1	66
LOCK & DAM 5	1	6	33	1	5	36	5	10	36	1	6	46	71	1133	4.4	86
DAVID D TERRY LOCK & DAM	1	5	80	1	4	30	5	9	29	1	4	37	50	1113	4.3	116
MURRAY LOCK & DAM	1	5	45	1	4	42	5	10	24	1	5	38	24	562	2.7	72
TOAD SUCK FERRY LOCK & DAM	1	8	35	1	6	40	5	10	45	1	7	37	31	579	2.8	90
LOCK & DAM 9	1	9	41	1	6	35	6	11	36	1	7	44	24	683	3.3	139
DARDANELLE LOCK & DAM	1	8	45	1	6	40	5	13	46	1	6	65	158	1410	7.1	63
OZARK LOCK & DAM	2	9	50	1	8	35	5	12	30	2	8	45	147	1579	8.1	100
LOCK & DAM 13	1	6	29	1	6	36	5	12	44	1	7	51	100	2462	4.8	125

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M5	TULSA	SOUTHWESTERN	7/85	8/85	9/85

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ARKANSAS RIVER	21-W D MAYO LOCK & DAM	0600/0110/14.0
	22-ROBERT S KERR LOCK & DAM & RES	0600/0110/14.0
	23-WEBBERS FALLS LOCK & DAM	0600/0110/14.0
	24-CHOUTEAU LOCK & DAM	0600/0110/14.0
	25-NEWT GRAHAM LOCK & DAM	0600/0110/14.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC #5	DISTRICT NAME TULSA	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED									
			7/85		8/85		9/85					
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LCKGES	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
-----												
ARKANSAS RIVER												
W D MAYO LOCK & DAM	***											
UPBOUND STATISTICS	97	318	2	417	202	247	449	100	121	6	227	367
DNBOUND STATISTICS	97	320	1	418	105	376	481	101	125	4	230	664
TOTAL	194	638	3	835	307	623	930	201	246	10	457	1032
ROBERT S KERR LOCK & DAM & RES	***											
UPBOUND STATISTICS	97	239	1	337	199	246	445	99	143	6	248	367
DNBOUND STATISTICS	95	249	0	344	99	363	462	98	153	7	258	674
TOTAL	192	488	1	681	298	609	907	197	296	13	506	1041
WEBBERS FALLS LOCK & DAM	***											
UPBOUND STATISTICS	94	90	1	185	163	251	414	97	74	11	182	374
DNBOUND STATISTICS	89	103	1	193	128	284	412	93	77	10	180	568
TOTAL	183	193	2	378	291	535	826	190	151	21	362	942
CHOUTEAU LOCK & DAM	***											
UPBOUND STATISTICS	87	45	4	136	173	183	356	92	42	16	150	261
DNBOUND STATISTICS	88	147	1	236	91	285	376	90	49	15	154	561
TOTAL	175	192	5	372	264	468	732	182	91	31	304	823
MEWT GRAHAM LOCK & DAM	***											
UPBOUND STATISTICS	86	32	5	123	172	181	353	92	31	8	131	258
DNBOUND STATISTICS	90	79	0	129	100	275	375	92	35	8	135	536
TOTAL	176	71	5	252	272	456	728	184	66	16	266	794

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/85 THROUGH 9/85  
INSTITUTE FOR WATER RESOURCES

EROC MS	DISTRICT NAME			DIVISION NAME								MONTHS REPORTED						
	TULSA			SOUTHWESTERN								7/85		8/85		9/85		
ALL TIMES EXPRESSED IN MINUTES																		
APPROACH			LOCK PROCESSING TIME (MIN.)								:	DELAYED	DELAY	DELAY	DELAY			
			ENTRY	CHAMBER				EXIT	:	TOWS	TIME	AVG	MAX					
MIN			AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	TOWS	TOWS	(ALL VSLS)		
ARKANSAS RIVER																		
W D MAYO LOCK & DAM			1	9	43	1	7	50	5	10	30	1	8	65	9	173	0.8	720
ROBERT S KERR LOCK & DAM &RE			1	5	23	1	6	46	10	14	19	2	7	49	23	649	3.3	100
WEBBERS FALLS LOCK & DAM			1	10	30	1	7	35	5	17	40	1	8	56	122	2522	13.7	155
CHOUTEAU LOCK & DAM			1	8	29	1	7	27	9	14	27	1	8	39	33	240	1.3	70
NEWT GRAHAM LOCK & DAM			1	9	49	1	8	31	6	13	31	2	13	76	27	444	2.5	65

## Appendix B

### Glossary

**Draft:** This is not a physical lock dimension. It is compared with new data before it is added to the central library to ensure that vessel drafts are not recorded improperly.

**Tows:** Only tows with barges are included with this figure. Tows without barges (light boats) and other commercial vessels are counted as "other vessels."

**Other vessels:** All vessels other than tows with barges and recreational vessels.

**Commercial lockages:** The number of lockages for which the prime mover is a tow, a light boat, or another commercial vessel.

**Recreational lockages:** The number of lockages during which there are only recreational vessels using a lock.

**Other lockages:** The number of lockages during which the prime mover is a government vessel, a government contracted vessel (such as a dredge) or an unidentified type of vessel. Also included in this category are navigable and open pass lockages.

**Total lockages:** A lockage includes all lock activity necessary to process a tow and is counted only once when more than one vessel uses the lock. Thus, both cuts of a double cut lockage (e.g. only part of the tow will fit in the lock and it is necessary to process the tow in two pieces) count as a single lockage together and the count increases by only one when two tows are processed during a single lockage.

**Processing time:** Only the times needed to process tows with barges are included in these statistics.

**Delayed vessels:** Number of tows experiencing delay between arrival time and the time the lock is ready to process them.

**Average delay:** Average time of delay for all tows.

**Maximum delay:** Maximum delay time for vessels. This figure may reflect a single, extraordinary circumstance and should be evaluated accordingly.

END

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